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MOSLEMS OF HIGH RANK — BEHAR : IN FULL SUMMER DRESS.

London 1838 W H … Leadenhall St

THE

HISTORY, ANTIQUITIES, TOPOGRAPHY, AND STATISTICS

OF

EASTERN INDIA;

COMPRISING THE DISTRICTS OF

BEHAR, SHAHABAD, BHAGULPOOR, GORUCKPOOR, DINAJEPOOR, PURANIYA, RUNGPOOR, & ASSAM,

IN RELATION TO THEIR

GEOLOGY, MINERALOGY, BOTANY, AGRICULTURE, COMMERCE, MANUFACTURES, FINE ARTS, POPULATION, RELIGION, EDUCATION, STATISTICS, ETC.

SURVEYED UNDER THE ORDERS OF THE SUPREME GOVERNMENT,

AND

COLLATED FROM THE ORIGINAL DOCUMENTS AT THE E. I. HOUSE,

WITH THE PERMISSION OF THE HONOURABLE COURT OF DIRECTORS,



BY

MONTGOMERY MARTIN,

AUTHOR OF THE "*History of the British Colonies*," &c.

IN THREE VOLUMES.

VOL. I.

BEHAR (PATNA CITY) AND SHAHABAD.

LONDON:

W^M. H. ALLEN AND Co. LEADENHALL-STREET.

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HINDOOS OF HIGH RANK _ IN FULL SUMMER DRESS.

London 1838. W. H. Allen & Co. 7 Leadenhall St.

J. Netherclift Lithog

DEDICATION.

TO THE CHAIRMAN, DEPUTY CHAIRMAN AND COURT OF DIRECTORS

OF THE

HONOURABLE EAST INDIA COMPANY.

HONOURABLE SIRS,

In soliciting your permission to place before the British Public the official survey of one of the richest territories in Asia, I have been acting in conformity with the whole tenor of my life for the last ten years in India and in England, of which the leading principle has been the consolidation and prosperity of the distant dependencies of the Empire. The survey described in the following pages had its origin in the laudable anxiety of your Honourable Court to enquire into the condition of the people, and the resources of the country, over whose affairs you were required to preside; and as the first step towards the attainment of good is the investigation of truth, it was in accordance with your wonted principles that this important enquiry was undertaken. From the mass of materials which you have had the goodness to permit me access to, I have culled, digested and arranged this work in the ardent hope that it may tend to awaken every serious thinking mind in these realms to the great responsibility which is involved in the possession of British India.

The history of that magnificent portion of Asia is without a parallel in the annals of the world, and scarcely less extraordinary is the rise and progress of that respected authority whom I have now the honour to address. Under the munificent auspices of one of England's wisest sovereigns you

commenced a mercantile career—which her noble patriotism fostered with all the prophetic feelings which characterized our Virgin Queen. Amidst the difficulties of jealous rivalry—subject to the weakness or arbitrariness of successive rulers—and controlled by various circumstances, your career was steadily onward, until from humble merchants struggling for existence you became the governors of one of the fairest portions of the earth. By what means and under what influencing motives you thus rose to supreme power over a country nearly as large as Europe, and peopled by an *hundred million* of human beings, I have elsewhere demonstrated; and time, the rectifier of error, will remove the calumnies which have been promulgated against the East India Company, and do justice to your principles and actions.

Peace, the precursor of so many blessings, was, through your instrumentality (so far as the records of ages extend) first established in Hindostan, and the bondage of the body, and the tyranny exercised over the mind, under which myriads had sunk, were exposed, with all their desolating consequences, to the chastening influence of a christian government.

But great as have been your past merits, they fall far short of the glorious honours which await on your future proceedings. It is easier to subdue than to govern; to administer is less difficult than to legislate; and to consolidate dominion requires more mental and moral power than its acquirement.

By the appointment of Divine Providence, a small island in the Atlantic has become mistress of vast and fertile territories in Asia, and you have been made not only the instruments for their acquisition, but divested of the mercantile character to which you owe your origin and progress, the executive power for their protection and well being has been confided to your Honourable Court. Alas! it is but too apparent that national or individual public responsibility is not sufficiently attended to in this professedly christian country, and although this reproach attaches less to your Honourable Court than to other constituted authorities, yet am I unwilling to permit the present opportunity to pass

without remark. The omniscient disposer of affairs would never have permitted our occupation of India for the mere sake of individual profit, or national advantage: it is a sacred trust reposed in England for the welfare of millions, and according to the exercise of that trust, will be the apportionment of future justice. Yet with what culpable apathy and criminal indifference has England heretofore regarded India! By some it has been viewed merely as a medium for mercantile exchanges, by others as a valuable source of patronage; not a few consider it as a grand field for the exercise of war or politics; and many deem it only a useful territorial appanage to enable England to maintain the balance of power in Europe.

Unquestionably beneficial as all these advantages may be to England, they have however but a secondary reference to India—and none at all in regard to the future state of millions of men;—whereas, if a moral responsibility for the trust reposed in Britain were felt and acted on, the most valuable and permanent results would ensue, and produce equal good to both countries now and for ever. Heretofore it must be admitted the great duties of your Honourable Court have been directed to the establishment of peace and the maintenance of our authority over the acquired provinces, but the following pages demonstrate what a new and truly noble field presents itself for the exercise of the power with which you are invested. The details which this survey exhibit would be painful to contemplate were there no prospective remedy. In the official returns thus made to your Government you behold a vivid picture of the physical, mental, and moral condition of the inhabitants of the fertile territories subject to your sway, you can trace in the small amount of the wages of industry,—in the scantiness of their food and clothing,—in the wretchedness of their tenements,—in the general poverty of their labour,—in the revolting superstition which pervades their minds,—and in the immorality which debases their nature—you can in all these combined trace the grievous effect of ages of anarchy and bloodshed, and misrule,—and in viewing their direful conse-

quences, your feelings must be harrowed by the pitiable spectacle thus exhibited, while your utmost energies will, I doubt not, be directed to the alleviation and cure of such portentous evils.

The miseries attendant on misgovernment, whether individual or social, are wide spread, of long extended duration, and consequent difficult removal. This truism is fully exemplified in India, and the duties required of England, and of your Honourable Court as her executive power are therefore most momentous. Judging from the past, we may with confiding hope, I trust, look forward to the future. Your freedom from commercial pursuits, the judicious selection of men for your Honourable Court, who are identified with the prosperity of India, and the high moral rectitude which characterizes the East India Company promises most auspiciously for the welfare of the Empire.

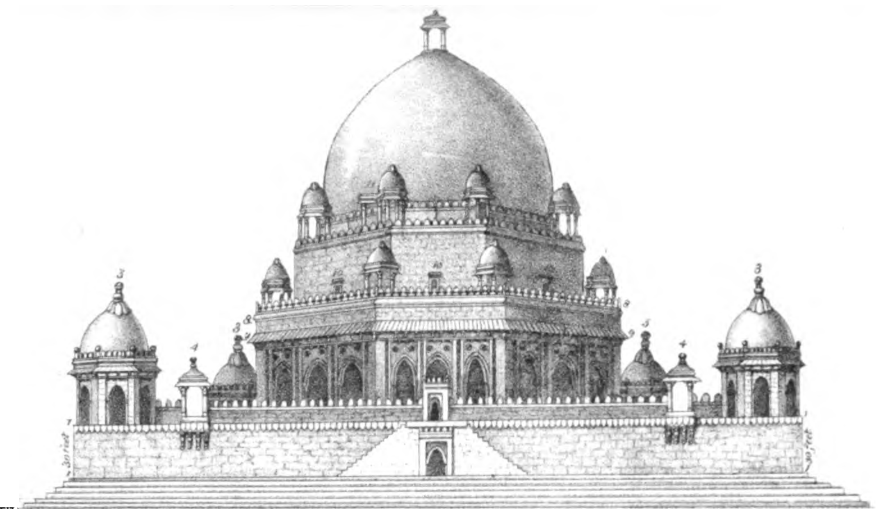
It is the duty of every friend to social order—of every patriot who wishes to see his country's fame and prosperity based on the rock of justice—of every Christian who desires the extension of the only true civilizing principles of the Gospel, to give to your Honourable Court a cheering support in the responsible station which you fill. On that station the eyes of every friend to mankind are fixed; for, on the fulfilment of its duties will depend the happiness of millions of our fellow creatures.

That the Almighty Disposer of events may in his mercy and goodness influence your thoughts, guide your judgments, and attend your actions, is the sincere desire of—

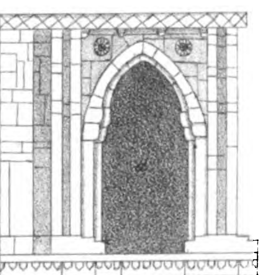
Your obliged and faithful servant,

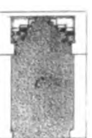
ROBERT MONTGOMERY MARTIN.

London, February, 1838.

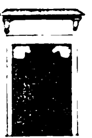


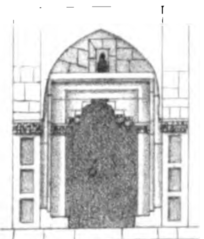
ELEVATION OF THE SOUTH FRONT OF SHER SHAH'S TOMB AT SHAHASRAM.











London. 1838. W. H. Allen & Co. 7 Leadenhall St.

J. Netherclift Lithog.

INTRODUCTION.

The survey of the districts of Behar and Patna, of Shahabad, Bhagulpoor, Dinajipoor, Goruckpoor, Puraniah, Rungpoor, and Assam, forming the Eastern territories of British India,* and containing upwards of 60,000 square miles and nearly 15,000,000 of British subjects, was executed by the Supreme Government of Bengal, under orders from the Court of Directors of the Honourable East India Company, dated the 7th of January, 1807, wherein the honourable Court observe, "*We are of opinion that a statistical survey of the country, under the immediate authority of your Presidency, would be attended with much utility; we therefore recommend proper steps to be taken for carrying the same into execution.*" The Court further added, that Dr. Francis Buchanan, who had been employed by the Marquess Wellesley in the survey of Mysore, and to whom his Lordship had confided the management of the establishment which the noble Marquess formed at Barrackpore for investigating the natural history of India,† should be appointed to undertake the survey.

The Governor-General in Council, in conformity with these orders, nominated Dr. F. Buchanan for this important duty, with an allowance of 1500 sicca rupees monthly, exclusive of the pay and batta of his rank, and efficient learned assistants, draftsmen, &c. were appointed to execute his instructions. The extent of the investigation will be seen from the directions issued for the guidance of the survey by the Supreme Government under date 11th Sept. 1807. which were as follows:—

* I have called the work "*Eastern India,*" to distinguish it from Col. Todd's "Western India," which contains Rajpootana, &c.; or from "Southern India," which includes Mysore, Tanjore, &c.

† The efforts of the Marquess Wellesley for the civil improvement of India were in unison with the genius which charactized and the ability which executed the momentous duties of his Government, and which after the lapse of forty years is now beginning to be viewed in a manner proportioned to its deserts; for, whether I regard the purity of his motives, the comprehensiveness of his mind, or the splendor of his actions, I feel assured that time will add new honours and glory to his name and increasing advantages to his country.—[R. M. M.]

"Your inquiries are to extend throughout the whole of the territories subject to the immediate authority of the Presidency of Fort William.

"The Governor General in Council is of opinion that these inquiries should commence in the district of Rungpur, and that from thence you should proceed to the westward through each district on the north side of the Ganges, until you reach the western boundary of the Honourable Company's provinces. You will then proceed towards the south and east, until you have examined all the districts on the south side of the great river, and afterwards proceed to Dacca, and the other districts towards the eastern frontier.

"It is also desirable, that you should extend your inquiries to the adjacent countries, and to those petty states with which the British Government has no regular intercourse. In performing this duty, however, you are prohibited from quitting the Company's territories, and are directed to confine your inquiries to consulting such of the natives of those countries as you may meet with, or natives of the British territories who have visited the countries in question.

"Your inquiries should be particularly directed to the following subjects, which you are to examine with as much accuracy as local circumstances will admit.

"1. A *Topographical* account of each district, including the extent, soil, plains, mountains, rivers, harbours, towns, and subdivisions; together with an account of the air and weather, and whatever you may discover worthy of remark concerning the *history* and *antiquities* of the country.

"II. *The Condition of the Inhabitants*; their number, the state of their food, clothing, and habitations; the peculiar diseases to which they are liable; together with the means that have been taken or may be proposed to remove them; the education of youth; and the provision or resources for the indigent.

"III. *Religion*; the number, progress, and most remarkable customs of each different sect or tribe of which the population consists; together with the emoluments and power which their priests and chiefs enjoy; and what circumstances exist or may probably arise that might attach them to Government, or render them disaffected.

"IV. The *Natural Productions of the Country*, animal, vegetable, and mineral; especially such as are made use of in diet, in medicine, in commerce, or in arts and manufactures. The following works deserve your particular attention:

"1st. The *fisheries*, their extent, the manner in which they are conducted, and the obstacles that appear to exist against their improvement and extension.

"2nd. The *forests*, of which you will endeavour to ascertain the extent and situation, with respect to water conveyance. You will investigate the kinds of trees which they contain, together with their comparative value,

and you will point out such means, as occur to you, for increasing the number of the more valuable kinds, or for introducing new ones that may be still more useful.

"3rd. The *mines* and *quarries* are objects of particular concern. You will investigate their produce, the manner of working them, and the state of the people employed.

"V. *Agriculture*, under which head your inquiries are to be directed to the following points:

"1st. The different kinds of *vegetables* cultivated, whether for food, forage, medicine, or intoxication, or as raw materials for the arts: the modes of cultivation adopted for each kind; the seasons when they are sown and reaped; the value of the produce of a given extent of land cultivated with each kind; the profit arising to the cultivator from each, and the manner in which each is prepared and fitted for market. Should it appear that any new object of cultivation could be introduced with advantage, you will suggest the means by which its introduction may be encouraged.

"2nd. The *implements of husbandry* employed, with the defects and advantages of each, and suggestions for the introduction of new ones, that may be more effectual.

"3rd. The manure employed for the soil, especially the means used for irrigation.

"4th. The means used for excluding floods and inundations, with such remarks as may occur to you on the defects in their management, and the remedies that might be employed.

"5th. The different breeds of the *cattle, poultry, and other domestic animals* reared by the natives. The manner in which they are bred and kept; the profits derived from rearing and maintaining them; the kinds used in labour; whether the produce of the country be sufficient, without importation, to answer the demand, or to enable the farmer to export; and whether any kinds not now reared might be advantageously introduced.

"6th. *Fences*, the various kinds that are used, or that might be introduced, with observations concerning the utility of this part of agriculture in the present state of the country.

"7th. The state of *farms*; their usual size, the stock required, with the manner in which it is procured; the expense of management; the rent, whether paid in specie or in kind; the wages and condition of farming servants and labourers employed in husbandry; tenures by which farms are held, with their comparative advantages, and the means which, in your opinion, may be employed to extend and improve the cultivation of the country.

"8th. The *state of the landed property*, and of the *tenures* by which it is held, in so far as these seem to affect agriculture.

"VI. The progress made by the natives in the *fine arts*, in the *common arts*, and the state of the *manufactures*; you will describe their architecture, sculptures, and paintings, and inquire into the different processes and machinery used by their workmen, and procure an account of the various kinds and amount of goods manufactured in each district. It should also be an object of your attention to ascertain the ability of the country to produce the raw materials used in them; and what proportion, if any, is necessary to be imported from other countries, and under what advantages or disadvantages such importation now is, or might be made; you will also ascertain how the necessary capital is procured, the situation of the artists and manufactures, the mode of providing their goods, the usual rates of their labour; any particular advantages they may enjoy, their comparative affluence with respect to the cultivators of the land, their domestic usages, the nature of their sales, and the regulations respecting their markets. Should it appear to you that any new art or manufacture might be introduced with advantage into any district, you are to point out in what manner you think it may be accomplished.

"VII. *Commerce*; the quantity of goods exported and imported in each district; the manner of conducting sales, especially at fairs and markets; the regulation of money, weights, and measures; the nature of the conveyance of goods by land and water, and the means by which this may be facilitated, especially by making or repairing roads.

"In addition to the foregoing objects of inquiry, you will take every opportunity of forwarding to the Company's Botanical Garden at this presidency, whatever useful or rare and curious plants and seeds you may be enabled to acquire in the progress of your researches, with such observations as may be necessary for their culture."

During a period of seven years the survey was sedulously pursued by Dr. Buchanan,* and then brought to a close, after an expenditure of about 30,000*l.*, and when only a portion of the territories under the government of the Bengal Presidency were investigated. The materials collected and the observations made were forwarded by the Supreme Government to the home authorities in 1816, and have since remained in the East India House. On my completion of the Marquess Wellesley's Despatches, I asked and obtained permission to examine the manuscripts connected with this survey;

* I hope in the concluding volume to furnish some account of Dr. F. Buchanan, who afterwards took the name of Hamilton, on the accession of a large property in Scotland, where this able and valuable public servant died a few years ago.

that examination convinced me that a judicious selection from the documents and information collected would be extremely valuable, by placing before the British Public a minute and official description of the condition of the mass of the people; while it would also tend to promote such further inquiries in India as will, I trust, enable us ere long to obtain a complete insight into the resources of that vast and fertile country; and into the social state of the millions of our fellow-subjects by whom it is inhabited.

The facts detailed in the survey, possess an intrinsic merit without reference to the time which has elapsed since they were recorded; but all who have visited the East will agree with me, that a few years makes no difference in the manners and habits of the people.

It is not my intention to make any comments on those facts in the present volume; when the whole survey has been placed before the public, I shall then draw such inferences as the nature of the premises may warrant, and which may perhaps be made conducive to future good.

It is impossible however to avoid remarking two facts, as peculiarly striking:—1st. The richness of the country surveyed; and 2ndly. The poverty of its inhabitants.

The reader who feels for the condition of myriads of human beings,—or even he, whose sympathies do not extend beyond the condition of England, is requested to bear these facts in mind when perusing the following and two subsequent volumes, in order that he may arrive at a just conclusion with me, as to the commercial injustice which England (with a shortsightedness that always accompanies crime) has so shamefully inflicted on her subjects in British India.

Nothing that I saw in India, or that I have ever read presents so descriptive a portraiture of the natives of Hindostan as these official documents exhibit, and which I confidently trust will tend to excite the minds of the wise and the good to co-operate in procuring from the Parliament of the Empire that mercantile reciprocity, of which so much has been heard with reference to foreign nations, but none at all with regard to our own possessions in India.

England *compels* the natives of British India to receive her steam-wrought manufactures at a rate of but 2½ per cent. while she imposes 20 to £30 per cent. on the hand-wrought cottons and silks of the Hindoos, whose sugar is taxed 150 per cent. coffee, 200 per cent. pepper, 300 per cent. rum, 500 per cent. &c. when imported into the United Kingdom; and this, from a country were England annually levies £20,000,000 sterling, and of which £3,000,000 and upwards, is yearly transmitted to London as tribute.

This annual drain of £3,000,000 on British India, has amounted in 30 years, at 12 per cent. (the usual Indian rate) compound interest, to the enormous sum of £723,997,971 sterling; or at so low a rate as £2,000,000 for 50 years, to £8,400,000,000 sterling!

So constant and accumulating a drain even on England would soon impoverish her; how severe then must be its effects on India, where the wages of a labourer is from two pence to three-pence a day? Were the hundred million of British subjects in India converted into a *consuming* population, what a market would be presented for British capital, skill and industry! If England permitted the importation on moderate duties of East India sugars, rum, tobacco, coffee, spices, &c. the Hindoos would then be enabled to purchase British merchandize to an incalculable extent; for instance 100,000,000 subjects consuming yearly a turban or gown piece, (10 yards at six-pence a yard) would create a demand for £25,000,000 worth of cotton goods per annum.*

The poverty which pervades the mass of the Hindoos alone prevents the use of our manufactures; whatever therefore elevates their condition, will confer a vast benefit on the trade of England; while the rude implements of art, the

* A part of Lord Wellesley's just policy towards India in 1800 was an endeavour to obtain the admission of India ships and their cargoes into the ports of England on terms approaching in some degree to reciprocity; but his Lordship's humane efforts on this point caused him great opposition at home—embarrassed considerably his government—and was the cause of the treatment which he received in England in 1806-7. Had justice been then done to the Hindoo manufacturer and cultivator, England as well as India would have benefitted by a policy which being based on justice would have been productive of general and permanent good.

want of money and intelligence for the efficient production of the various manufactures carried on by the natives (as demonstrated in the annexed pages) shews the widely profitable field which is open for the beneficial employment of British skill and capital. Reserving however the general remarks arising from an investigation of the singular and interesting facts which the survey records for the third volume, I commend its careful perusal to every friend of India, and to all who may desire a social history of many millions of the human race.

*** The general arrangement of the survey as given in the manuscripts, has been preserved, as it seems to have been adopted in accordance with the instructions of Government. As many drawings as it was possible to give in this volume, have been reduced in size from the originals in the India House, and they will be continued in the two subsequent volumes, on which no reasonable expense will be spared to render these historical documents worthy of being considered a national record. With the third volume will be given an Index to the whole survey, a glossary explanatory of Indian words, an explanation of Hindu chronology and idolatry, and several other documents which the English reader may find necessary for the better understanding of the subjects discussed, and with a view to make the work in every way complete.

In the Appendix will be found the statistical details of the districts of Behar and Patna city, by divisions or Thannahs (police stations), but in Shahabad the totals for the district only are given, as affording sufficiently ample information. The fractional parts in the Appendix Tables refer to the divisions of the Rupee into 16 *anas* and 64 *pysas* or *paysas* : the Hindoos calculate by *fours*, and many things are therefore divided by 16ths or 64ths.

ARRANGEMENT OF THE ILLUSTRATIONS.

CONTENTS OF VOL. I.

BOOK I.—BEHAR AND PATNA CITY DISTRICT.

BOOK II.—DISTRICT OF SHAHABAD.

APPENDIX.

CONTENTS.

ERRATA.—Appendix, page 2, for *Ghatuha* read *Phatuha*.
In the summings up of the Rupees in the Appendix tables, the *anas* and *pice* are omitted in the columns, which will account for the slight discrepancy in the totals.

STATISTICAL VIEW OF THE DISTRICTS OF BEHAR (PATNA CITY), AND SHAHABAD.—[Prepared from the Survey.]

District.		Division or Thanah.	Area in Square Miles.	Population.			Number of Houses.	Exempt from Flood.		Value of Landed Produce. Sicca Rupees.	Commerce.		
				Hindoos.	Moslems.	Total.		Clay Land. Square miles.	Free Soil. Square miles.		Exports. Sicca Rupees.	Imports. Sicca Rupees.	Total in Sicca Rupees.
Patna.	1	Patna city .	20	214500	97500	312000	18000	2	13	194152	3259558	6510546	9770104
	2	Phatuha .	145	75525	25175	100700	3500	24	13	598880	326100	149825	475925
	3	Nonbutpur .	106	52000	31200	83200	1500	56	48	537060	12400	3935	16335
	4	Bakipur-Jaywar	88	52400	30770	83170	2400	51	22	567117	4700	102075	106775
	5	Sherpur .	44	15100	15100	30200	600	12	9	247865	9300	4440	13740
		Total .	403	409525	199745	609270	26000	145	105	2145074	3612058	6770821	10382879
Behar.	1	Gaya . .	968	282375	169425	451800	20000	143	736	4068903	29250	111495	140745
	2	Nawada .	953	347625	23175	370800	13000	141	718	3037125	150650	20500	171150
	3	Sheykhpurah	598	326325	108775	435100	6750	371	185	2179958	169860	24600	194460
	4	Duriyapur .	200	105481	15069	120550	2600	..	44	860899	32300	30500	62800
	5	Bar . .	166	72713	24237	96950	2000	3	38	838182	139300	34700	174000
	6	Behar . .	317	127437	76463	203900	4120	175	126	197667	261990	49625	311615
	7	Helsa . .	357	196650	65550	262200	8000	186	60	2075986	18500	3400	21900
	8	Holasgunj .	304	145275	48425	193700	4000	228	47	1991138	1300	2990	4290
	9	Jahanabad .	276	132125	79275	211400	5220	160	79	1301768	17100	11500	28600
	10	Daudnagar .	327	100375	60225	160600	6750	133	135	1565761	54050	70025	124075
	11	Arwal . .	261	84150	28050	112200	4300	140	109	1193011	34780	8300	43080
	12	Vikram .	228	110460	25490	135950	3100	30	182	1327691	78850	7350	86200
		Total .	4955	2030991	724159	2755150	79840	1719	2459	22416503	987930	374985	362915
Shahabad.	1	Arah . .	313	179500	21860	201360	5000	35	59	1493299	97999	78334	176333
	2	Biloti . .	297	121050	13450	134500	3500	100	33	895341	317084	73475	390559
	3	Dumraong .	439	158970	8030	167000	4000	321	28	1341029	39515	20127	59642
	4	Ekwari . .	380	137670	11730	149400	3000	147	148	1067228	83216	43621	126837
	5	Karangja .	392	118730	5570	124300	2500	152	173	963124	16719	28404	45123
	6	Baraong .	356	141880	2610	144490	3000	127	149	1160931	46440	46460	92900
	7	Shahasram .	379	119130	9100	128230	4000	138	42	768525	35683	22441	58124
	8	Tilothu . .	360	38600	6360	44960	1500	..	24	298970	19344	10743	30087
	9	Mohaniya .	317	84620	9110	93730	2700	142	68	1582296	199794	15967	215761
	10	Ramgar .	312	138590	4610	143200	1500	199	104	1274200	57359	9805	67164
	11	Sangyot .	282	82440	5910	88350	2500	122	70	953159	81979	15800	97779
		Total .	4087	1321180	98340	1419520	33200	1483	898	11798102	995132	365177	1360309
		Grand Total	9445	3761696	1022244	4783940	139040	3307	3462	36359679	5595120	7510983	12106103



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J. & C. Walker Sculpt.

HISTORY, TOPOGRAPHY, ANTIQUITIES, &c.

OF THE

PROVINCE OF BEHAR.

BOOK I.

DISTRICTS OF BEHAR AND PATNA.

CHAPTER I.

AREA, TOPOGRAPHY, RIVERS, LAKES AND MARSHES, METEOROLOGY, &c.

The territory included in the following survey occupies the central parts of the Mogul province of Behar. Its greatest extent from the banks of the Kiyul to its south-west corner near the Son, in the direction of east northerly, and west southerly, is about 120 miles, and its greatest width, crossing the above line at right angles, from Patna to the boundary of Ramgar upon the Bardi river is nearly 80 miles. According to Major Rennell its southern extremity is in about 24° 30′ and its northern in 25° 39′ N. lat. Its eastern extremity is about 2° 3′ E. from the meridian of Calcutta, and it extends 1° 46′ farther in that direction.

Tracing the boundaries on Major Rennell's map, it contains 5,358 square miles, of which about 403 belong to the city jurisdiction, and 4,955 to Behar.*

SOIL.†—There is much land of rather a poor soil; but the proportion absolutely unfit for the plough is smaller than in Bhagalpur, or Puraniya. Close up to the very hills is in general arable; there being, even in their immediate vicinity,

* Dr. Buchanan says, that the boundaries are ill defined.—[ED.]

† The Editor has preserved Dr. Buchanan's arrangement of the survey, although a better might have been adopted: his language also has been in general retained.

very little stony broken land, and there are few of those extensive tracts of high sandy barren land, which in Puraniya are so prevalent. The land occupied by rock, or stones, is confined almost entirely to the hills, and these are in general exceedingly rugged and barren. No part of them has been brought into cultivation, nor could it be done to advantage. In a few fields near or among the hills small stones are scattered amidst the soil; but, where other circumstances have been favourable, these do not impede the plough.

Very few of the islands in the Ganges belong to these districts, and its southern bank is in general high, so that the quantity of land which it has covered with sand, is inconsiderable, and is chiefly confined to the islands. Near the larger rivers of the interior again, especially near the immense channels of the Son and Phalgu, the strong dry west winds of spring have blown from the parched beds of these torrents large heaps of sand, which form little hillocks, frequently changing place, and perfectly barren, but the extent is not great, and reaches only a very short way from the channels. The channel of the Son again is in some places of a tolerable soil, and in the dry season is cultivated without the smallest danger of interruption from its stream, although these cultivated parts are not at all higher than the surrounding sands, and cannot be considered as islands. Where the soil is alleged to be incapable of cultivation, on account of its being too sandy and light, it is usually called *shor*, *usar*, *reher*, or *bala*. The third term is however more peculiarly applied to the soil containing soda, which is always of a sandy nature, and some soils called *reher* contain no soda; but all soils containing that substance are called *reher*.

In the western parts of the district especially, is some high swelling land of rather a poor soil, and much neglected, being covered with thorny bushes, among which in the rainy season there is some pasture; but in the dry season it is exceedingly parched and dismal. This circumstance gives it the appearance of more sterility than it actually possesses, and on the whole it is much neglected, more however owing to the fault of its owners than its own defects; for, where pains have been bestowed, it produces several crops.

Calcareous nodules are found in various parts of these dis-

tricts; soda is much more copious than in Bhagalpur, and in some parts was reckoned to render the soil unfit for cultivation; while in others the fields, on which it effloresces are regularly cultivated. Where the soil is fitted for rice, the soda seems to do no harm; because during the rainy season it is so much diffused by the water employed in the cultivation of this grain, that it does little injury; but, when concentrated by drought, so as to form a white efflorescence on the surface, it would seem to burn up whatever is attempted to be reared.

A soil red on the surface is very uncommon, and is chiefly confined to some poor sandy lands; but in a few parts there is a yellowish clay very productive, when properly supplied with water. It often contains calcareous nodules, and is found chiefly on the bank of the Ganges. The prevailing soil is of an ash colour, more or less inclining to brown, and partly clay, partly mixed. The clay is most commonly called *kewal*, and on the whole is reckoned best. It is most retentive of moisture, and some crops can be reared on it in the dry season without artificial watering, a circumstance in these districts of great importance.

The mixed soil in most parts of the interior of the country is usually called *pairu*, and must on all occasions be watered, even when cultivated with some of the crops (wheat and barley,) that on clay soil would, it is alleged, be injured by that operation; and in fact almost the only thing that will grow on it during the dry season without watering, is the *Cicer arietinum* (But.) This *pairu* soil is however seldom very free, so that, when it is necessary to have a field well dressed, the implement called *chauki* is in general required to break its clods. Near the Ganges, and in the east side of the district the mixed soil is more usually called *dhus* or *dorassa*, and requires less irrigation, or even none, if it is liable to inundation. When the mixed soil is stiffer than usual, and approaches to clay, in some parts it is called *guri-dorassa*, being then of a whitish colour; but in some places the *guri* is reckoned a species of clay. In some parts again a rich free soil is called *basori*, while *dorassa* is confined to that of a poorer nature; and, if the proportion of sand be very great, it is called *balasundri*.

Elevation.—The hills here, like those of the western part

of Bhagalpur, being all of what is called a primary structure, are exceedingly rugged, although some, from a difference of their component parts, are more broken than others; but this difference is chiefly observable at a distance. On a near approach all are found almost equally barren, and unfit for the plough. Their sterility is rendered more conspicuous by their nakedness; for in many parts they seem incapable of producing even bushes; and, where a few trees would spring, they are kept in a very stunted condition, being cut so soon as it is possible to convert them into charcoal. Nor is the naked and broken appearance of these hills in any degree enlivened by flocks; for the greater part of the year they are too much scorched to produce any herbage. Towards the southern boundary, however, they are not so hideous. There the extent of forest gives an ample supply of fuel, and the precipices are covered with trees and bamboos sufficient to enliven the view, although they do not acquire great dimensions. A great many of the hills are scattered about with the utmost irregularity, and are quite insulated among the soil of the plains, by which they are surrounded; but in the heart of the district are three remarkable clusters. One on the west side of the Phalgu is of a roundish form, and contains a good many hills separated by various level passages, and each possessed of an appropriate name. The whole cluster by the natives whom I consulted is called Barabar-Pahar, a name said to have been given by the Moslems. In the Bengal atlas this cluster is called the Currumshaw hills, the origin of which name, I presume, is as follows: A ruin of antiquity called Karna-chaupar, or the seat of Karna is found on these hills. Major Rennell finding them celebrated for this antiquity, seems to have considered the final *par*, as the word *pahar*, a hill, and from Karna-chau, has formed Currumshaw. Another cluster or ridge, is on the east side of the Phalgu, and runs about W. S. W. and E. N. E. for a considerable way. From its vicinity to the abode of many potent kings of the most remote antiquity, this chain is called the *Rajagriha-pahar*, hills of the palace. It consists of two parallel ridges with a narrow valley between, and is intersected by various passages. Adjacent besides to the two ridges are many detached peaks and hummocks. The third cluster is the least considerable, and

is a long narrow ridge adjacent to Sheykhpurah. It runs for some way from east to west, and then bends towards the north. It consists of a single narrow ridge with several interruptions and narrow passages. The elevation of none of these hills appeared to me considerable. Those immediately above the hot and sacred springs of Rajagriha seem to be the highest, and to judge by conjecture, may be about 700 feet perpendicular height. The hills towards the southern boundary are more considerable, and some of them may be twice as high as those of the palace of the ancient kings. They in general run easterly and westerly; but, so far as the extent of this district goes, there are level passages among them in all directions; a continuation of hills, however, and of narrow vallies, reaches with little or no interruption to a great extent, and perhaps to Cape Comorin, and all these hills are considered as a part of the Vindhyan mountains, by which the great Gangetic plain is bounded on the south. The hills of this district no where approach the Ganges; and they in general arise immediately from the plain with very little, and often no broken ground adjacent to their roots.*

The interior of the country, reckoning from the Ganges as an ocean, is in general flat, and does not rise into swells like the Bhagalpur district, so that it is better fitted for the cultivation of rice; but it is by no means liable to inundation, and has been fitted for this crop by vast pains bestowed in collecting and conducting water. In a few places the torrents from the mountains overflow their channels, for a day or two during the heaviest falls of rain, and do some occasional injury; but this is trifling, and such inundations, which happen only in some years, in general improve the fertility of the soil, over which they have extended, nor have I considered land liable to such accidents as inundated. In general, however, these torrents have worn channels of so great a width and depth, that they seldom overflow.

The immediate bank of the Ganges in most places is high, and is not inundated except perhaps in some spots, where at the very highest floods, for a day or two, it may be covered to a few inches. This land is called *Bhitha,* as affording a

* The hills are generally named after the villages which they overtop.

good situation for houses, or *Dihi*, implying high. It is in general very rich, and highly cultivated. It gives in the rainy season a crop of maize or janera *(Holcus sorghum)* intermixed with various articles; and in the dry season large quantities of wheat, barley, poppy and vegetables are reared by artificial watering. Where the immediate banks of the Ganges are low, and subject to inundation, they are called *Diyara*. The whole extent of such land at all considerable is between Duriyapur and Suryagarha on the frontier of Bhagalpur, and it entirely resembles the very productive land of that district, to which it is adjacent.

Parallel to the Ganges, and extending from the eastern extremity of these districts to a little west from Patna, is a low tract analogous to the Chaongrs of Bhagalpur, but in this district such land is usually called Tal or Jala, although in a few places the term Chaongr is also employed. Here such land is very well cultivated. Where the water covers the ground very deep, it can only be used for winter crops; but, where the inundation rises only a few feet, it has been intersected in all directions by small banks, which divide it into plots for rice, and exclude all water that is superfluous; while sluices admit a supply, when the rain that falls on the plot is inadequate. The whole of this Tal or Jala, together with a few islands and low banks (Diyara) on the side of the Ganges, with the parts of the channel of the Kosi that are cultivated, as before mentioned, constitute the inundated land of these districts.

The term *Tariyani*, it must be observed, is here applied to the bank of the Ganges, whether high or low, whether clay resisting the encroachments of the river, or a soft mould crumbling every year in one place and collecting in another. In Nepal the same term is applied to the part of the kingdom that is situated on the great plain of Hindustan, and implies the country of boats.

In the Appendix will be seen the proportion of the inundated land that is generally covered throughout the rainy season, and that is only covered, for some days at a time, twice or thrice in the season.

Rivers.—*Ganges*.—It might be expected that this immense river, fed by innumerable sources, springing from perhaps the highest mountains in the world, would in spring

receive large additions from the melting snow, and would then receive a large increase. Some of the branches of the Ganges no doubt receive such an increase; but owing to the circumstances explained in the survey of Puraniya,* the increase is in general by no means considerable, and in the Ganges at Patna is little, if at all perceptible. The people indeed say, that no increase is ever observable, until a movable feast called the Dasahara, which happens on the 10th day of the moon in Jyaishtha, and is in fact about the usual commencement of the periodical rains. The melting of the snow undoubtedly contributes to enlarge the river; but is not able to counteract the causes of diminution; and Patna is so far from the sources of the Ganges, or of any of its grand branches, that any cause suddenly affecting them produces no visible change. In this district the Ganges is no where fordable at any season, and its channel, when clear of islands, is generally about a mile wide; but in spring by far the greater part is a mere dry sand, covered with clouds of dust, which render all objects at any distance invisible; so that, travelling on its channel, one might imagine himself in the midst of a frightful desert. The channel is almost every where pure sand, in a few parts however there is clay, which in the dry season is usually cultivated.

The Ganges comes to the boundary of this district just where it is joined by the Son, a little way above the town of Sherpur. From thence it passes east with an undivided channel, until it reaches about two miles beyond the cantonments of Danapur, forming in general the boundary between the districts of Patna city and Saran; but immediately above the cantonments a small corner of the latter is placed on the south side of the river. On this part of the Ganges, Danapur and Digha are the only places in these districts which carry on an export and import trade by water.

The island, when Major Rennell made his survey, which was opposite to the cantonment of Danapur, seems to have been carried away; and that, which was then situated east from it in the middle of the river, now in a great measure adheres to the southern bank. In the rainy season a passage

* Some of the districts were surveyed before that of Behar and Patna, but as Behar and Patna include the capital of the province it has been first published.—[Ed.]

still continues open, but in the fair season its upper end becomes perfectly dry, and boats can no longer reach the Company's cloth factory situated on the former bank of the river. This island is now about six miles long, and, where largest, about one broad. The upper end belongs to this district, and the lower to Tirahut. In the rainy season some goods are exported and imported by water at the Company's factory and at Barker-gunj. Many boats, however, especially those intended for the accommodation of travellers, are kept in the lower end of this channel at Barker-gunj.*

The main channel passing round the north side of the above mentioned island, does not now receive the Gandaki at Hajipur; a long, wide, and cultivated tongue of land projects from the west side of the Gandaki, and passing east about six miles from Hajipur, separates the stream of the Gandaki from the Ganges; but, as in the rainy season, a small channel separates this tongue from the northern shore; the union of the two rivers is still supposed to take place where it did formerly, and on the full moon of Kartik the holy spot is frequented by immense multitudes, and at Hariharchhatra on the west bank of the Gandaki, opposite to Hajipur, there is then held a very great fair, especially for horses. In the great channel of the sacred river, between this tongue of land and the custom-house at Patna, is a small island; but both this and the tongue belong to Tirahut.

Below this island the main channel washes the walls of the old city of Patna, where many goods are imported at Khajeh Kulangghat. Immediately below the old city is Marusgunj, the principal seat of trade in Patna; and a little lower down, at Rekabgunj, there is some business. About the extremity of the suburbs, at Jafur Khan's garden, the Ganges divides into two branches, which surround a very large island divided into two very unequal portions, and about nine miles in length. Part of both portions belong to the district of the city of Patna, and part to that of Tirahut. The river here taking a bend to the south, the branch, which goes to the east of this island, is by far the largest; but boats of any size can at all seasons pass through the western channel be-

* As the shifting of the beds of the Ganges is very remarkable, these statements are given as a means of making comparisons in future years; the Editor has printed other parts of the survey for the same interesting purpose.

tween the island and Phatuha. This is a place where there is much trade.

From the lower part of this island to Bar the Ganges runs easterly for about 21 miles with an uninterrupted channel. For some way part of the channel is claimed by the people of this district, but opposite to the whole division of Bar all the channel is considered as belonging to Tirahut. For about eight miles however above Bar there runs parallel to the Ganges an old channel of the river, navigable in the rainy season alone, and separating from the main a narrow island called Ramnagar Diyara, which belongs entirely to this district. Bar is a place of very considerable trade; but the only place between it and Phatuha, where exports or imports are made, is Kusbah-Nawada, a mart of very small importance.

Below Bar the Ganges takes a considerable sweep to the north, and a narrow old channel separates from the main an island belonging to this district called Malai-Diyar, but this channel is navigable only in the rains, nor is there any mart on this part of the river.

Beginning about five miles below Bar, the Ganges runs S. E. for about 28 miles to the boundary of the district of Behar with Bhagalpur. Opposite to Duriyapur, about 16 miles in a direct line from Bar, are two islands, one belonging to Tirahut and the other to Behar. Except at this last place the whole in this extent of the great channel of the Ganges is alleged to belong to Tirahut, but the whole south bank belongs to Behar. On this are Mokayang and Duriyapur, two small marts.

About two miles below Duriyapur the Ganges sends off a small channel called *Mar-Gang*, or the dead river, which soon separates into two branches, each taking the same name, and after a course of eight or nine miles they reunite, and immediately afterwards, joining the Haluhangr, communicate with the Kiyul by means of the Rohuya. In the dry season the water of the Haluhangr Mar-Gang and other adjoining creeks seems perfectly stagnant, and in the floods sometimes runs one way and sometimes another, according as partial rains swell one channel more than another. On the banks of the southern or western branch of the Mar-Gang is situated Barhaiya, a small mart.

The eastern and northern branch of the Mar-Gang, which, when Major Rennell made his survey, seems to have been the great channel of the river, is in some parts of its course called Sarla. It soon divides into two branches, the south western of which or the Sarla, rejoins the first described, and most westerly Mar-Gang; while the other, called also Mar-Gang, runs parallel and near to the great Ganges, until it approaches Suryagarha, where it joins the Kiyul. These three old channels of the Ganges, together with its present grand stream, and the Kiyul, include three very large and fertile islands, which have given rise to numerous disputes and bickerings, nor are the limits belonging to the adjacent districts of Bhagalpur, Tirahut, and Behar, at all clearly defiued.

The Rivers which fall into the Ganges.—In the account of the rivers which fall into the Ganges from the southern parts of Bhagalpur, their general appearance is described, and it entirely resembles that of the following rivers, only that one of those in Behar,—the Son, is larger than any in Bhagalpur, and at all seasons and in every part of its course contains water above ground. This immense torrent forms the indisputed boundary between these two districts and Shahabad for about 55 miles in a direct line from its mouth upwards, and is in general almost equal in size to the channel of the Ganges. After heavy rains the channel is almost filled, but does not overflow, and has a rapidity that is scarcely compatible with navigation upwards; but during the rainy season boats of five or six hundred măns* burthen pass the whole extent of these districts, and small boats of 20 măns can pass the whole year. During the dry season there are many fords; but the ferry boats in all places ply eight months in the year, and there being many long reaches that at all seasons have every where deep water, some boats are kept there throughout the year. The aspect of the river during the heats of spring is still more desert than that of the Ganges, and its eastern bank is in many parts overwhelmed with sandy, barren downs, blown up from its channel. In some parts the channel consists of clay and is cultivated. It is nowhere rocky, but with the sand are intermixed a va-

* A măn or maund is equal to 74 lbs. 10 oz. 10,666 drs. avoirdupois. —[Ed.]

riety of small pebbles, some of them very ornamental, and the floods have strength enough to carry some of these as far almost as the mouth of the river. The Son, according to the Bengal Atlas, formerly joined the Ganges at Mănēr, but a tongue of land has been formed, projecting east from the Shahabad district, so that Mănēr is now three miles at least above the junction of the two rivers. The Son receives no branch during its course in these districts, but sends off some old channels that in different places are called by its name. The chief of these separates from the river 11 or 12 miles above Mănēr, runs straight east to the Thanah of Vikram, and then bends north until it passes Thanah Noubutpur. Immediately beyond this it sends to the right a branch, which, running through the whole breadth of the division of Bakipur, joins the dry channel of the Ganges, and is called Mahauliya. The main channel of the Mar-Son, soon after the separation of the Mahauliya, divides into two branches, which reunite before they fall into the Ganges at Danapur. That to the west is called Deonar, that to the east is called Bhadaiya. It must however be observed, that an old channel may be traced running from this Mar-Son, and parallel to the Ganges, a great part of the way to Bakipur, near the western extremity of Patna city, and this may have been the old channel of the Son, and Patna may possibly therefore have been once at the junction of this river with the Ganges; but among the natives there is no tradition concerning such a circumstance; and the place where the two rivers now join is considered holy, and held to have been so from time immemorial. North a little way, from where the last mentioned Mar-Son separates from the present river, a similar channel, also named Mar-Son, separates, but rejoins the river after a course of six or seven miles. At Mănēr also another channel separates from the Son, and rejoins it just where it falls into the Ganges.

These branches of the Son are of no use either in navigation or for watering the fields. The great Son is too deep sunk in its channel for the last mentioned purpose; and its power during the rainy season could not be controuled by dams: nor is it of much use in navigation. Some timber and bamboos are floated down in rafts; and during the rainy season some goods are imported and exported by its means at Daudnagar in the district of Behar, and Mănēr in the district

of Patna. By far the greater part however of the exports and imports in the vicinity of the Son are made by land carriage.

The Punpun (Pompon river), from the number of canals that it supplies with water for irrigation, is of great importance to agriculture. For this purpose, indeed, some of its tributary streams would appear, since the time of Major Rennell's survey, to have been entirely diverted from its channel, and have been so much subdivided among the fields, that they can no longer be traced to a junction. In the driest part of the year it contains a stream to its very junction with the Ganges, but it is of very little use in navigation. Small boats could occasionally go up in the rainy season, but the voyage is too uncertain, and goods are therefore transported almost entirely by land carriage, but ferries are required.

The Punpun comes from the Ramgar district, and soon after receives a torrent named Adri, which flows from the same quarter. Some miles below this it receives from the same direction a river named Madar. In February the Punpun, a little below the junction of the Madar, had a channel about 100 yards wide. It contained a fine clear stream, perhaps 30 yards wide and knee deep. A little lower down the Punpun receives a rivulet which passes Goh, and therefore must be what Major Rennell called Goorah, but the people say that its name is Bilaro, and in February it is so very inconsiderable at Goh, that it was passed without observing it. Major Rennell gives it a long course from Ramgar, but we could only trace it from Angti in the division of Sahebgunj, its course having been probably interrupted by canals for irrigation.

Between Tikari and this channel at Goh we crossed two fine rivulets, that to the west called Nera, that to the east named Sinane. In February both contained fine streams of water, with which they supply the adjacent fields; but it is said that neither reaches the Punpun; both are previously entirely distributed among the fields. In the time of Major Rennell it would appear that upwards they united, and were two branches of one river rising in Ramgar; but we were assured that this connection can no longer be traced. Both run in small channels of very stiff clay, which prevents their water from being absorbed in the dry season, and resists

their action during floods. Both are now alleged to rise in the Sahebgunj division, but the Nera passes through a projecting corner of Ramgar.

From the mouth of the Bilaro the Punpun has downwards a very long course without receiving any addition, or without sending off any branch, canals for irrigation excepted; and thus passes through the divisions of Daudnagar, Arwal, Jahanabad and Vikram, in Behar. On entering the district of Patna, in the division of Noubutpur, it sends to the west a small channel named the Pangchhara, which joins the main stream towards the northern boundary of the division. In November we crossed the Punpun at Pitwangs (Fetwas river), just above where the division takes place. Its channel there is about 150 yards wide, and was then half covered with a dirty stream about two feet deep.

From entering the district of Behar, until the reunion of the Pangchhara, the general course of the Punpun is about north east; but at the junction it runs nearly east, and runs in that direction about 18 miles, until it joins the Ganges at Phatuha. About midway it receives from the north a considerable branch named the Murahar (Moorhur river). This comes from the Ramgar district, and soon after dividing into two branches that reunite, forms a large island. The smaller channel on the west is named the Bur (Boorah river). Below the reunion, in December, we crossed the Murahar at Pangchananpur, where it is much larger than the Punpun, being perhaps one-third of a mile wide. The stream is not however larger, but was then beautifully clear, and contained many small fishes, for it never becomes dry. At Phatuha, where the Punpun enters the Ganges, it has very high, steep banks (30 feet perpendicular), and the entrance is 100 yards wide.

The Phalgu is remarkable for its sanctity, and by its numerous branches intersects more than half the district, but its nomenclature is confused. It is formed a few miles above Gaya by the union of two immense torrents, named the Mohane and Nilajan. The former, although the least celebrated and the smallest of the two, may be considered the principal source of the river, because the lower part of the channel towards the Ganges is called by its name. It enters the district of Behar from Ramgar about 20 miles south-east from Gaya, and in December contains a considerable stream;

while its channel, which is very sandy, may be 300 yards wide. After passing for some way through Behar, it has that district on one bank, and Ramgar on the other, but soon again re-enters the former. Some way below, at a place considered holy, it changes its name for a short space, and is called the Saraswati. Two Burmas of rank, who lately came with a view of reporting to their king the condition of the places in the neighbourhood, which he considers holy,* informed a Sannyasi, whom they converted to the doctrine of Gautama, that in the Pali language this river is named the Mahananda; for from their books in that language they were able to trace the situation of the places, in search of which they came. The other branch, of which the Phalgu is composed, enters the district about 11 miles south from Gaya, and is a sandy channel about 400 yards wide, but its stream in December was not so considerable as that of the Mohane. Opposite to the extensive ruins of Buddha-Gaya, this river is separated by a sandy channel into two arms. The western in the Hindi dialect is named Kanaksar; but in the Pali it has the name of Subarnasar: the eastern and largest arm in the Hindi is called Nilajan and Niringchiya in the Pali. Both in December contain streams, but very trifling.

The Phalgu, formed by the union of these torrents, soon reaches the high and rocky shores of Gaya, where, when free of islands, it may be 500 yards wide; but in many places islands considerably swell its dimensions. In the beginning of January water stood on many parts of the surface; but there was little or no stream to connect the pools, and in the heats of spring it becomes perfectly dry; but at all seasons plenty of good water may be procured by digging a very little way into the sand. It is usually said, as if believed, that the holy part, which extends about half a mile, occasionally flows with milk, but we met with no person who pretended to have seen this occurrence, nor to describe the appearance, which has given rise to the opinion.

From Gaya the Phalgu runs north-easterly with little change for about 17 miles, when opposite to the Barabar hills, it divides into two branches, and the name of Phalgu is

* They were probably sent as political spies.—[Ed.]

entirely lost. Many indeed pretend, that this name should be entirely confined to the part of the river that is sacred at Gaya, and that all the remainder should be called Mohane; but the people in the vicinity seem usually to extend the term to the whole channel, between the fork about three miles above Gaya, and this fork situated about 17 miles below the holy place.

The westernmost of the branches, into which the Phalgu divides, is named the Sungr. From the place of separation it runs some way west to the rocks of Barabar, where it receives a small muddy channel named the Bhurbhuri. The Sungr then turns south, and in February, when crossed, the channel, which was perhaps 250 yards wide, had a small stream of clear water, which must be fed from springs issuing below the separation, as both the Phalgu and Mohane were then quite dry.

The eastern branch of the Phalgu, which resumes the name Mohane, and is a sandy channel about 400 yards wide, in February has no water on the surface. A little way below the fork the Mohane divides into two arms, which enclose an island about 20 miles long. The western arm, which retains the name Mohane, passes Holasgunj, and some way below that sends off to the west the canal named Mansinghi. Above this its course is nearly north; but where the Mansinghi separates, it turns to the north-east, and soon after passes Islamnagar, a pretty large country town, where its channel is about 100 yards wide, and contains a stream under ground, for canals cut obliquely across the channel procure in February small streams for the irrigation of the fields. Near Islamnagar the Mohane sends to the north the channel named Nanayang, which, as before mentioned, receives the Sungr, about 13 miles after its separation from the Mohane, and after a course of six miles farther north falls into the branch of the Punpun called Dhoya. In this space the Nanayang communicates by a short channel with a small drain named the Chiriwang, which runs parallel to it on the east, and after a course of about 10 miles joins the Dhoya about a mile below the Nanayang. The Nanayang, when crossed in the end of January was a small sandy channel quite dry. The Chiriwang is so inconsiderable, that it was

not distinguished from the numerous canals, by which the country is intersected.

The east arm of the Mohane is named Jalawar, and is a sandy channel about 100 yards wide, in February containing no water above the sand, but plenty under the surface. About 12 miles from the fork the Jalawar receives from the south a small drain called merely *Nala* or drain.

A little above, where the Jalawar rejoins the Mohane, it receives from the south a river of very considerable length named the Pengwar. This comes into the division of Sahebgunj, from Ramgar, at the west end of the great hill named Lohabar. Near the hills of Maher, when crossed on the last of November, it was a small channel in a deep stiff clay, but containing a fine stream of water. A little below, it received a stream similar to itself, but which has a shorter course, rising from springs in Sahebgunj division. This is named the Bangsi.

Soon after receiving the Bangsi the Pengwar passes through a chain of low rocky hills, which in December was a considerably rapid but dirty stream, passing through a narrow rocky channel. The Pengwar then passes by Narawat, at the north-west corner of the Raja Griha hills; and near the boundary of Sahebgunj receives, from between the two ridges of these, a small torrent named Alyani. From thence it has a long course north-east, through Holasgunj, to the boundary of the division of Behar. It then turns north, separating Behar from Holasgunj, until it joins the Jalawar; but in this space sends off an arm named Itawang, which joins the Mohane some way below the reunion of the Jalawar.

Although the Phalgu, after the junction of the Mohane and Nilajan, is a great channel, from 500 to 800 yards wide, and, although after heavy rains this immense extent is often filled with water, rushing past Gaya with tremendous noise and velocity; yet the chief continuation of the Mohane, below the junction of the Jalawar, is a channel perhaps 20 yards wide, but deeply sunk in a stiff clay; and on the 22d of January, when crossed, it contained only a little dirty stagnant water, and in the dry season dams of clay are made across it to turn the water upon the fields. In the rainy

season the numerous branches and canals, into which the Mohane is subdivided, receive the immense torrent, that rushes down the Phalgu, and disperse it through the country, so that it seldom overflows.

This part of the Mohane, after receiving the branch of the Pengwar named Itawang, sends to the east a branch named Barhal, which is soon lost by subdivision among the fields.

After sending off the Barhal the Mohane winds towards the north-east, through a very low country in the division of Bar until it is joined by the branch of the Punpun called Dhoya, which brings with it the water of all the western branches of the Phalgu. The other rivers or branches are the Dardha, (east branch of the Murahar), Gamund, Baradmuta, Katri, Mahatain, Bhutaha, Dhor, Panchane, Tati, Som, Dharar, Teturija, Dhanarje, Sob Khuri, Jokahar, Harkhari, Singgarhat, Adya, Boloya, Dhanain, Sakri Kumri, &c.*

LAKES AND MARSHES.—In these districts we observed nothing that could be called a lake, and the marshes, properly so speaking, are of little or no extent. The greater part of the country, indeed, for the cultivation of rice is converted to a marsh in the rainy season, and is then, if possible, preserved under water until December; so that, until after the rice harvest travelling is exceedingly difficult, but this inundation is artificial. The Jala or Chaongr lands, that run parallel to and near the Ganges from Patna downwards, more resemble marshes; but in November they in a great measure become dry, and are then ploughed and sown.

CLIMATE.—By far the most prevalent winds are from the east and west, and in most parts of the district nearly in the same proportion. On the banks of the Ganges, towards the Son, it was stated (by the natives who furnished this information on climate) that the west winds most usually prevail from the 13th of January to the 26th of March. From thence to the 12th of June the east and west winds are nearly equal. From thence to the end of July the east winds prevail, and until the end of August the west winds prevail. From thence to the end of October the east winds return; and finally from thence until the 10th of January the east and west

* Dr. Buchanan bestows considerable space on the survey of these rivers, but it was necessary to abridge his report.—[ED.]

winds are nearly balanced. This year (1812) and the last, the east winds have prevailed during the four months of Spring, when the west winds should have predominated. In the rainy season, especially near the Ganges, there are occasionally north and south winds; and on the banks of the Son it is alleged, that whatever wind may prevail in the day, every morning the wind comes from the south; and while I was there, this no doubt happened. This is a strong confirmation of the winds being influenced by the course of great rivers. In many parts of the district the south winds are considered as highly injurious to vegetation; and if they blow for three or four days at a time, occasion heavy loss. The west winds also are injurious to vegetation; and if they are strong early in the season, injure the crops of wheat, barley and opium. The west wind drys up the juice of palms, while these bleed freely during the prevalence of wind from the east.

Although the west winds are injurious to vegetation, they are most friendly to animal life;* and the seasons, in which easterly winds have prevailed much, have always proved unhealthy. In the heats of Spring storms from the north-west are usual, and they are sometimes accompanied by rain or hail. Such rains are in fact unwelcome, and in this district are considered as interfering with the harvesting of wheat, barley, and poppy seed.

The rainy season is usually of the same duration as in Bhagalpur; but when the fall in Aswin (15th September—15th October) has not been very copious, the crops of rice suffer, unless there is a good deal of rain in Karlik (16th October—13th November). These rains however do no good to any other crop; and if the fall in the end of Aswin has been copious, are not required even for the rice. Rains, which happen in January, are injurious to most crops, especially to wheat, although the fields of that grain require at that season to be artificially watered. This is a curious circumstance, but a vast variety of authorities assert that it is well founded. The rains in January, it must be observed, do little harm, if the falls are sudden, and immediately are succeeded by sun-shine; but two or three days of cloudy

* This is a remarkable fact, if it be corroborated by experience.—[Ed.]

weather, with drizzling rain, entirely burn up the crop of wheat.

Fogs usually prevail in the morning, from the middle of December until the middle of February, but this year as well as last we did not observe one foggy morning, nor hear of any person who had observed above two or three. In Bengal this is considered as a prognostic of scanty rain; but last year the rain fell in abundance. The dews are not near so copious as towards the east, and when a west wind blows, are scarcely observable. The winters are much the same as in Bhagalpur, and the one, which we passed in the district of Behar, was much milder than any of those passed in the northern parts of Bengal. All the people, however, who can possibly procure it, sleep by a fire at night; but fuel is very scarce, and they would suffer more than the people of Bhagalpur, were not their huts warmer. We often heard of frosty nights having destroyed some of the crops; but, although two or three such were said to have occurred while in the district, we observed no degree of cold that approached that temperature, while ice has been formed spontaneously in the most southern parts of Bengal. This country is however more favourable than Bengal for the artificial production of ice, the dry westerly winds necessary for that operation being more common.

The heats of Spring are here very severe, and are exceedingly aggravated by the dust, there being then no vestige of herbage. At that season not only the west winds, but those from the east, when strong, are hot and parching. By means of hurdles placed at the doors and windows, and kept constantly wet, rooms may be kept very cool and pleasant, when these winds are hottest and strongest; but when it is calm, or light airs prevail, these hurdles give little or no relief, and the only remedy is to exclude the external heated air and dust as much as possible. The nights are then tolerably cool, but towards the end of the rainy season very oppressive. The heat of this district, upon the whole, is much higher than that of Tirahut. The difference between Patna even and Hajipur on the two banks of the Ganges is very observable, and between Gaya and Mozuffurpur is much greater than the trifling difference of latitude can be supposed to produce. This seems owing to a greater moisture and more

powerful vegetation in Tirahut; but among the natives Behar is considered as a very healthy country, while Tirahut is far from being so, although, except its northern parts, it is not so bad as some of the districts farther east. It must be also observed, that Patna and Gaya are hotter than most parts of the district. The heat of the former seems to be owing to a great extent of naked sand on an island of the Ganges immediately fronting the town. The heat of Gaya seems to be owing partly to the immense sands of the Phalgu, and partly to the reflection of the sun from the arid rocks, by which the place is surrounded. Thunder is much in the same proportion as in other districts; but there is less in Spring, owing to the squalls of that season being more moderate than in Bengal.

In Jyaishtha of the Fusli year 1218, that is in May, A.D. 1811, there was here a very strong gale, which blew down many trees and huts, and killed several people. It was stronger here than at Mungger, but there also it did some harm. It was by no means, however, a tremendous hurricane, nor are such tempests at all common. The winds seem to be more temperate than usual in Europe. Slight earthquake shocks are as common as in Bengal, and occasion as little alarm.

CHAPTER II.

HISTORY OF THE PROVINCE OF BEHAR.

The remains of antiquity are exceedingly numerous in this district, but the traditions on the spot concerning them are very often altogether irreconcilable with appearances or with credibility, and still oftener contradict the few historical hints to be found in Hindu legend, while very often the people* have no sort of tradition concerning the antiquities of their vicinity. The reason of this would appear to be, that in this district from a very remote period down to almost the very Muhammedan conquest, although now completely extinct, the doctrine of the Buddhists seems to have prevailed, and would appear to have been in general the doctrine professed by the governing powers.

The whole of these districts is universally allowed to be in the old Hindu territory called Magadha, and respecting this in the account of Bhagalpur several circumstance are stated. I now however suspect, that this is a name considerably more modern than the government of Jarasandha or of his family, princes descended from Budha first king of India. Jarasandha, like many old kings of India, is called an Asur, which is usually interpreted to imply an enemy of God; but many of these Asurs appear to have been uncommonly religious, and I am inclined to think, that the term Asur implies in reality an Assyrian, and there are many traces to show, that the worship of the Assyrian queen, and its concomitant doctrines, had been introduced at the capital of Jarasandha,

* Dr. Buchanan says, "the people here are perhaps still less interested on this subject than in Bhagalpur, and even the Moslems seem to have abandoned all care of their history. At Behar, where several persons of good family and excellent manners reside, although one of them is called a Moulavi or Doctor of Laws, I could not procure from them any account of the Muhammedan governors of that city, nor did they possess any one historical book."

although there are also many traces of the worship of the Buddhas, which had probably arisen in the interval between the arrival of Budha, the ancester of Jarasandha from Assyria, and the extinction of the family of the Brihadrathas, descended from that ancient prince. Jarasandha, according to legend, being of a monstrous size, was wont to stand upon two hills of this district, having a foot on each, and to look at the 1000 wives of his kinsman Krishna, who lived near Gujjarat, as they bathed in the sea. Not contented with this indecency, which might perhaps have been overlooked, he pelted the naked beauties with bricks, on which they complained to Krishna, who sent Bhim, the supposed son of Pandu, to punish Jarasandha, and this prince was killed in a valley near his own house. This happened towards the end of the third age (Dwapar Yug) of the world; and, according to the valuable system of Indian chronology given by Mr. Bently (Asiatick Researches, vol. 8), the 4th age commenced in the 11th century (1004) before the birth of Christ.

The monarchy of India, according to common opinion, was after a short dispute transferred to Yudhishthir, the brother of Bhim; but, if Major Wilford is right in supposing that the Gangetic provinces continued to be governed by the Brihadrathas, or descendants of Jarasandha, for 700 years, the power of the great king must have been much circumscribed.

In the account of Bhagalpur I have supposed, that although Jarasandha is usually called king of Magadha, that Madhyadesa was the proper denomination of his empire, and that the term Magadha was not given to the territory of his family until its extent was reduced by his overthrow; but even after that event the kingdom seems to have been more extensive than that to which the term Magadha is ever applied. The most rational derivation of the term Magadha is that given by Major Wilford (As. Res. vol. 9, p. 32). Samba, the son of Krishna, in order to cure himself of a disease, introduced a colony of Magas or Brahmans from a country called Saka. But Krishna being contemporary with Jarasandha, the introduction of the Magas by his son Samba must have been after the death of Jarasandha. Nor can we suppose that a small colony of physicians should at once change the name of a powerful kingdom in which they set-

tled. It is farther worthy of remark, that the term Madhyadesa seems to have been applied to this country so late as the birth of Gautama (542 years before Christ); for in the account of that lawgiver, collected by Captain Mahony in Ceylon, he is said to have been born in Madda Dese, and he was undoubtedly born in the district of Behar.

These Magas are supposed to have introduced the worship of the sun, and there are many traces to show that the worship of this luminary is here of great antiquity; although I suspect that it was rather introduced by the conquests of the Persians under Darius than by the Magas or Brahmans, who probably came from Egypt, the only country I know where the doctrine of caste prevailed, and prevailed as described in the books of the Brahmans, and in a manner quite different from what they have been able to establish in India. If the Brahmans actually came from Egypt, we should naturally have expected that they would have preferred the worship of Isis and Osiris to that of the sun, especially as on their arrival they would find prevalent the very analogous doctrine of Belus and Semiramis, that is of Mahadeva and Parwati. By Brahmans I mean the highest or sacred order of the present Hindus, although I am sensible that the term has been applied to several distinguished persons, such as Vyas, who lived in India before the doctrine of caste became prevalent.

The introduction of these deities and priests by no means destroyed the religion of the Buddhas. Gautama considered as the lawgiver of Ava and Ceylon, and son of Maya, it is alleged was born in this district, and resided at Buddha-Gaya, under the protection of a Dharma-Asoka, who I presume is the same with the Ajaka mentioned among the kings of Magadha by Major Wilford (As. Res. vol. 9), as contemporary (A. D. 542) with Gautama. This personage did not found the sect of the Buddhas, nor is the great temple of Dharma-Asoka dedicated to the lawgiver of Ava. It is, however, held in the highest veneration by the people of that country, as being the place where their lawgiver worshipped Mahamuni, the real founder of the sect. Gautama, the son of Maya, is not only claimed by the people of Ava as their lawgiver, but is worshipped by the Jain as the favourite disciple of Mahavira, who flourished about 582 years before Christ, and according to this sect, several petty princes of

their persuasion governed in this country for 400 years before that period, and these have left behind some monuments, although none of any magnitude, nor to be compared with those of the Buddhists, who are acknowledged by the Jain to have retained the chief authority in Magadha in all times of antiquity. A Gautama is also claimed by the Brahmans as one of their most distinguished saints, and I have no doubt is the same personage whom the heretical sects worship. He seems to have been a person of very eminent science and reputation, who perhaps belonged to none of the three sects by whom he is now claimed. As this person is mentioned in the Vedas, these works must have been composed long after the time of Vyas, who was contemporary with Jarasandha, although he is usually considered as their compiler; but he is also universally given out by the Brahmans as the author of the Purans, some of which at least are evidently composed since the commencement of the Hijri; so that the opinions of the Brahmans on this subject cannot be implicitly received. In this district are very numerous monuments, which I refer to the period of Gautama, or of the Sunaka dynasty, of whom Ajaka or Dharma-Asoka was one. These monuments are attributed to a people called Kol and Chero, and some allege that these were different tribes, but in general they are considered as the same people, and I am persuaded that this is the case; for I am informed by Ramsundar Mitra, a very intelligent Bengalese, who long managed the revenue of Ramgar, where both people are still numerous, that they are in fact the same tribe; but that like the Bhungiyas of Bhagalpur, the Kol adhere to their old impurity of life; while the Chero, like the Suryabangsis of the same district, adhere to the rules of Hindu purity, and call themselves Kshatriyas or Rajputs; and among the fastnesses of Ramgar several chiefs of that tribe still retain considerable property. From the districts, of which I am now giving an account, both Kols and Cheros have been entirely eradicated, but the honour of this atchievement is disputed. In general, quite contrary to my supposition, it is alleged that this tribe was expelled by the Muhammedans, led by a saint named Ebrahim Mulek Bayo; but for several reasons I do not hold this opinion tenable. These conquerors by no means expelled the Bandawats, who seem to have been possessed of the greater part

of these districts at the time of the conquest, and the whole actions attributed to Ebrahim Mulek Bayo are exceedingly apocryphal, no such person, so far as I can find, being mentioned by historians. Farther, we are told by Major Wilford (As. Res. vol. 9, p. 91), that Yayati, an ancestor of Jarasandha, divided his empire among his five sons, and that Turvasu obtained the south, and in the 10th generation from Turvasu four brothers, Pandya, Kerala, Kola and Chola, divided the country between them. Kola lived in the northern parts of the Peninsula, and his descendants are called Koles to this day. That a whole nation should be descended from one prince, I confess, appears to me very improbable; but that a nation may have derived its name from a prince, may be believed. The Kols of this district may therefore have been the same with these Koles of the northern part of the Peninsula, now called Telingana, and on the failure of the direct line of Jarasandha, their prince, as a collateral branch of the same family, may have succeeded to the government of the Gangetic provinces, and may be the same with the Sunakas of Major Wilford, among whom Ajaca or Asoka was the fourth prince. This, I think, will be confirmed by the appearances which now remain. Kabar, the chief ruin attributed to the Kols or Cheros, is in the immediate vicinity of Buddha-Gaya, where the palace of Asoka stood, and has evidently been the work of a powerful prince, and strongly fortified, while the palace at Buddha-Gaya seems to have had very slight defences. I therefore presume that Kabar was the stronghold of the prince, who lived at Buddha-Gaya. But farther, these works are vastly too great for the supposition, that they belonged to petty chiefs, who at the time of the Muhammedan conquest occupied the small territory intervening between the country of the Bandawats on the east, and of the Raja of Kanoj and Banaras on the west. I therefore consider as much more probable, though less common, the tradition, which states that the Kol and Chero were expelled by the military Brahmans, who still possess the country, although these have been since subject to several other tribes. In the account of Bhagalpur* I have described the present condition of these wretched people, and given a specimen of their language, which seems to be

* Bhagalpur will be contained in the next volume.—[Ed.]

one of the original dialects of India, very little intermixed with the Sangskrita, and probably one of the barbarous dialects called Magadhi by the Sangskrita grammarians; for I have no doubt that the Pali, or sacred language of Ceylon and Ava, though introduced from Magadha, is merely a form of the Sangskrita language, and in Magadha was always a dead or learned language, having been introduced from Iran by the conquerors, who first civilized the Hindus. It is especially to be remarked that the priests of Ceylon, according to Captain Mahony, allege, that in Madda desa (Madhya-desa), when Gautama was born, the art of writing was not known; and the Kols, that is the dregs of the people, seem to have entirely rejected his doctrine, as they still do that of the Brahmans. The chief people or Chero, if Asoka was one of them, no doubt adopted the worship of the Buddhas, but have since been converted to the orthodox faith. It is also to be remarked, that this unfortunate tribe has not only been expelled from their new acquisitions on the Ganges, but has been driven into the barren recesses of their original territory in the north of the Peninsula by the Andhras, who seem originally to have come from the west of India, and have communicated their name to the original country of the Kols, which is also called Telingana from the warlike habits of its modern occupants. The vocabulary of the Kols has been examined by a Brahman of Telingana, who declares that it has no kind of affinity with the language now spoken in his native country, or to what in Madras is usually called the Gentoo language.

I have not been able to learn, on what authority Major Wilford calls Patna by the name of Padmavati, the residence of Nanda, king of India in the 4th century before Christ, and this denomination for Patna is not known to such, as I have consulted; nor could I hear of any remains of antiquity at the Mawbellypoor of Major Rennell on the Son river, which is said to have been the abode of Mahabali, another name for the same prince. I therefore suspect, that this great king never resided in this district. It seems to me however to have been about this period, that the Brahmans descended of the Magas arose into great distinction, and communicated to this district the name of their ancestors.

I have found in this district no traditions concerning Chandragupta nor his descendents the Baliputras, although

Palibothra his capital, is by Major Rennell supposed to be the same with Pataliputra, or Patna. This city is indeed allowed by all the Pandits to be called Pataliputra, but Pataliputra has no great resemblance to Palibothra, nor can Patali be rationally considered as a word of the same origin with Pali, said to be an ancient name of this country, and of its people and language. In the vicinity of Patna few traces of antiquity remain as a guide to conjecture; but, with all due deference for the opinion of Major Rennell, I doubt very much of its having been the Palibothra of the Greeks. The conjecture of Major Wilford, in the fifth volume of the Asiatick Researches, placing Palibothra at the old junction of the Kosi with the Ganges near Rajmahal, seems better founded, although all traces of the city have been swept away by numerous changes in the river; and although, when in that vicinity, I heard no traditions concerning the great personages who resided at Palibothra. But the Pali are still the most numerous tribe in Matsyadesa, the country immediately north and east from the situation, which Major Wilford assigns. Although this country no doubt belonged to the kings of the Gangarides, it was so far removed from their capital, that no traces of them are now to be discovered. That Patali however, has been a place of great consequence, from its being now universally called Patana, or the city by way of excellence, there can be no doubt, and this seems to have been during the reigns of the earlier princes of the dynasty of the spurious Andhras of Major Wilford, (As. Res. vol. 9, p. 43,) who governed until the year 640 after the birth of Christ; but between this period, and the government of the Baliputras ending about 160 years before the birth of Christ, Behar seems to have risen into great note, as capital of the Magas, and of their country Magadha.

At one time (before Christ, 800) this city, according to a learned priest of the Jain who resides there, belonged to a petty chief of that sect; but was afterwards fortified by a Maga Raja, who seems to have been a very powerful prince, and the ruins of buildings, attributed by all to this Maga, at Baragang, in the vicinity of Behar, are of an astonishing magnitude, as will be afterwards described. The persons, by whom they have been erected, have evidently been Buddhists, and were probably either the Andhra kings, or the princes

who intervened between them and the descendents of Chandragupta; but they are abhorred as infidels, nor have I been able to learn any tradition concerning their names.

To return to the spurious Andhra princes, who began to govern the Gangetic provinces from the year A. D. 200, I have said, that the first of them the Karnas probably resided in the Bhagalpur district; but some considerable monuments in Behar may be traced to this family. I must here correct an error in my account of Bhagalpur. I there have stated, that these princes were probably of the sect of Jain; but a learned priest of that sect, who resides at Behar, informed me, that the Karna Rajas were heretics. They were probably Buddhists, as Major Wilford states, on the authority of the Chinese annals, that the king of the Gangarides in the year 408 of the Christian era was of that sect, and this opinion is confirmed by the monuments, which these princes have left in Behar. It must be however observed, that Sudraka the first of the spurious Andhras is said by Major Wilford to have governed at Pataliputra (As. Res. vol. 9, p. 146;) but of this I can learn nothing on the spot, while at Bhagalpur, and in the interior of this district, the Karnas have left numerous traces and traditions. At Patna it is alleged, that Patali the daughter of Sudarsan Raja founded that city, and I suspect that Major Wilford may have considered Sudarsan and Sudraka as the same name, an error into which I was at one time led. There was a Raja Sudarsan, a prince of the family of the sun, and the 18th in lineal descent from Mama; but whether or not the father of Patali was the same person, I do not pretend to conjecture. The latter princes of the dynasty of the spurious Andhras lived probably at Patna, and according to Major Wilford had palaces at Phulwari and Sambalpur in the vicinity; but, very few remains of antiquity are to be found in that vicinity, which may perhaps be owing to changes occasioned by the river.

I have not discovered any remains of considerable works being attributed to the Pala Rajas, or other princes of note, who governed the Gangetic provinces after the overthrow of the dynasty of the spurious Andhras. The Palas, I believe, resided usually at Chandalgar or Chunar, so far distant, that none of their great works extended to this district; but several inscriptions acknowledging their power remain at Gaya;

and one of them perhaps had a house at Narawat. This dynasty is well known to have been of the sect of the Buddhas. In fact, so far as relates to Magadha, until the approach of the Muhammedans, the Brahman priests, although this probably was one of their most ancient abodes in India, if not their original seat, do not seem to have made much progress in converting the people. There is even reason to suspect, that by far the greater part of even these Magas became infected with the heresy of the Buddhas, for the term Maga is by many Brahmans in this country considered as synonymous with *kirat*, or infidel; and it is supposed by all the orthodox Hindus, that whoever dies in Magadha, will in a future life be born an ass, the emblem of his obstinacy; while, from what I have above narrated, it will appear, that most of the dynasties which have governed Magadha, have professed the doctrine of the Buddhas. It is to this period which intervened between the overthrow of the spurious Andhras and the Muhammedan conquest, that we may with the greatest probability refer the government of Basu Raja, of whom an account is given in the Vayu-Puran. He resided at Rajagriha in Behar, the ancient seat of Jarasandha; and, although perhaps tributary to the Palas, seems to have been a prince of considerable power. He was undoubtedly orthodox; and, being desirous of establishing an orthodox priesthood for the sacred places near his residence, seems to have been under the necessity of bringing persons of the sacred order from the south of India, as the Brahmans of Magadha where then probably infected with the doctrine of the Buddhas. It must however be observed, that one of the ancestors of Jarasandha was named Basu, and probably resided in the Rajagriha. It may therefore be supposed, that this was the Basu, who introduced the Brahmans of that place; but as the Vayu-puran, in giving an account of Basu and his colony, alludes to the usual division of Brahmans into ten nations, and as that division appears very modern, it is by far most probable that he was of a late date, when compared with Basu the ancestor of Jarasandha.

In 1192, according to Dow's translation of Ferishta, Cuttab, who was the first Muhammedan king of Delhi, (then in the service of Mahommed Ghori,) defeated Rai Joy, probably the last of the Pala family, who was king of Kanoj and Ba-

naras; after which he took possession of the country as far as Bengal without opposition. It seems however very doubtful, whether any part of this district belonged then to the Raja of Benaras, as Indradawan, a Bandawat Rajput, had possession of the adjacent parts of Bhagalpur, and he no doubt possessed also the whole eastern parts of this district, where many traces remain of him and his tribe. I consider him as of the Andhras nation, and founder of the great city of Warankol. The adjacent country had probably belonged to his ancestors for several generations; as the ancestors of Pratapa Rudra, the last king of Warankol, are said to have possessed the regal power for eighteen generations; and the time between the retreat of Indradawan, and the destruction of Warankol will not admit of so many princes. Indradawan therefore, propably relinquished his Gangetic territory without a struggle, contented to preserve what was defended from the ferocious Moslems, by the fastnesses of the Vindhyan mountains.

In 1225 Yeas-ul-din was appointed governor of Behar by Altumsh king of Delhi, who had then reduced Bengal to his authority; but so careless were the Muhammedan princes, that the two viceroys of these kingdoms entered into a regular war, in which the governor of Behar was killed. In the year 1266, the inhabitants of Patna (Pattiali) joining those of Bhojpur stopt all intercourse between Delhi and Bengal, were severely punished by Balin, and forts were ordered to be built. It is therefore probable, that the governor of Behar then resided at the city of that name, and that this is the date of the present fort of Patna at the east end of the city, although it may have been since repaired or enlarged.

In the weakness of the reign of Mahmood the 3d. (A.D. 1393,) the Hindus rebelled, particularly those of the eastern provinces, and in an inscription at Gaya mention is made of a Maha Raja Prija Ral, in the year 1372, (Samvat, 1429,) so that the rebellion must have lasted at least 20 years. The Vizier on this occasion assumed the title of king of the east; and, proceeding with a great army to Behar, soon reduced that country to obedience, and took up his residence at Jionpoor, where he seems to have remained undisturbed until after the retreat of Timur, from Delhi in the year 1397. In 1400 he died; but Behar seems to have continued subject to

a king of the east, residing at Jionpoor until 1478, when Beloli overthrew that dynasty, and made Barbek his son viceroy; but he seems to have had little authority, and the Hindu Zemindars raised to the dignity of king of the east a sultan Hassen, who appears to have been in possession of Behar in the year 1491, and then advanced almost to Benares to dispute the whole empire with Sekunder the 1st. He was defeated by that prince, and retired to Behar by the way of Betiya, the Raja of which was one of his chief supporters. Sekunder advancing to Behar, Hassen fled to Alla the king of Bengal; when the king appointed a certain Mohabut to govern Behar; and, having reduced Tirahut, and performed his devotions at the shrine of Shuh Sherrif at Behar, advanced towards Bengal, with the king of which he concluded a peace (A. D. 1494). Soon after the government of Behar was given to Deria the son of Mobarik. In 1516 it was again attempted to establish a separate kingdom of Jionpur in the person of Jelal-ul-din; but Dirai Lohani the governor of Behar adhered to Ibrahim king of Delhi, and was a principal means of quashing that rebellion. He himself however soon after rebelled, and in 1519 Muhammed the son of Dirai of the tribe of Lodi suba of Beria (I presume Behar), that is, I suppose, the same Dirai formerly called Lohani, took the title of king. This introduced an anarchy which brought into Hindustan the Mogul Baber.

About this time Shere Khan the son of a Patan who had obtained a grant of Saseram rose into considerable notice, became a principal person in the court of this Muhammed or Mahmud of Behar, and was afterwards sole manager of the affairs of his son Jelal. At this time Behar was a very pretty principality, Hajipur opposite to Patna, and Mungger belonging to the king of Bengal, while Chandalgar (Chunar), formed the government of an independent chief named Taji. Shere Khan soon expelled his master, and seizing on Behar acquired much wealth by an attack on the Bengalese, and by a marriage with the widow of Taji, which put him in possession of the important fortress that had belonged to her husband. In 1528 the Patan chiefs of Behar assembled at Patna, deprived Shere of its government, and created king Mahmud the son of Sekunder king of Delhi. This prince apparently reconciled Shere to his interest, but in an action with the

Mogols soon after was betrayed by that perfidious chief. Shere however soon quarrelled with the Mogol Humayun, seized on Behar and invaded Bengal, which he had in a great measure reduced when the Mogol attacked Chandalgar, and having taken it followed Shere into Bengal (1539). The Afghan unable to resist retired to Jharkhanda, that is the hilly region between Virbhum and Benaras, but not without having secured most of the treasure of Bengal; and soon after he had the address to seize on Rotas by surprise. The Mogol by the sickness of his army was soon compelled to leave Bengal, and having been lulled into security by Shere was defeated. Another victory in 1540 gave Shere the possession of India.

In 1553 the empire was divided between two persons of the family of Shere, and Behar with the eastern provinces fell to the share of Mahummed, who took up his abode at Chandalgar, and his government was overthrown by Akbur. In 1564 Sekunder, governor of Behar, joining with several other Usbek chiefs, rebelled against that prince, and they do not seem to have been finally reduced until 1567. In 1574, on the invasion of Bengal by Akbur, a certain Momin, who had been very useful in that transaction, was made governor of Patna and its dependencies, and at that time probably it was that this city became the capital of Behar. In 1575 Momin, proceeding in the reduction of Bengal, repaired Gaur; but dying immediately after was succeeded by a Hoseyn, who was appointed governor of Bengal and Behar, and in the same year completed the conquest of the former. Hoseyn died in 1578, and the people of Bengal immediately revolted. In 1587 Man Singha, a noble Hindu, was appointed governor of Behar, and in 1592 advanced to Bengal, where he reduced Cullulu, the Afghan chief who had seized on that country, annexed Orissa to the empire, and by the monstrous marriage of his sister with Jehanggir acquired great power; but his nephew Khusero rebelling in 1606, he was involved in suspicion. In 1606 Islam Khan was governor of Behar. In 1611 a person pretending to be Khusero, the son of Jahanggir, raised a mob, seized on Patna, then the capital of Behar, and taking possession of the palace, women and wealth of the Subah, gave up the town to plunder. Soon after he was defeated and killed. The Subah's palace would

then appear to have been within a fortified city, although the present fortifications are usually attributed to a later date. In 1624 Shah Jehan having rebelled against his father, and conquered Bengal, advanced to Behar. Muchlis Khan, the governor, retired without resistance, and Shah Jehan took up his abode in the palace of the Subah in Patna. He then, having been joined by Mobarek governor of Rotas, removed his family to that impregnable fortress, and appointed Nazir Khan to the government of Behar. Soon after, on his advance towards the capital he was defeated, and retired to Patna; but on the approach of his brother Parviz fled through Bengal to the south. In 1625 he delivered himself and family to his father and was pardoned.

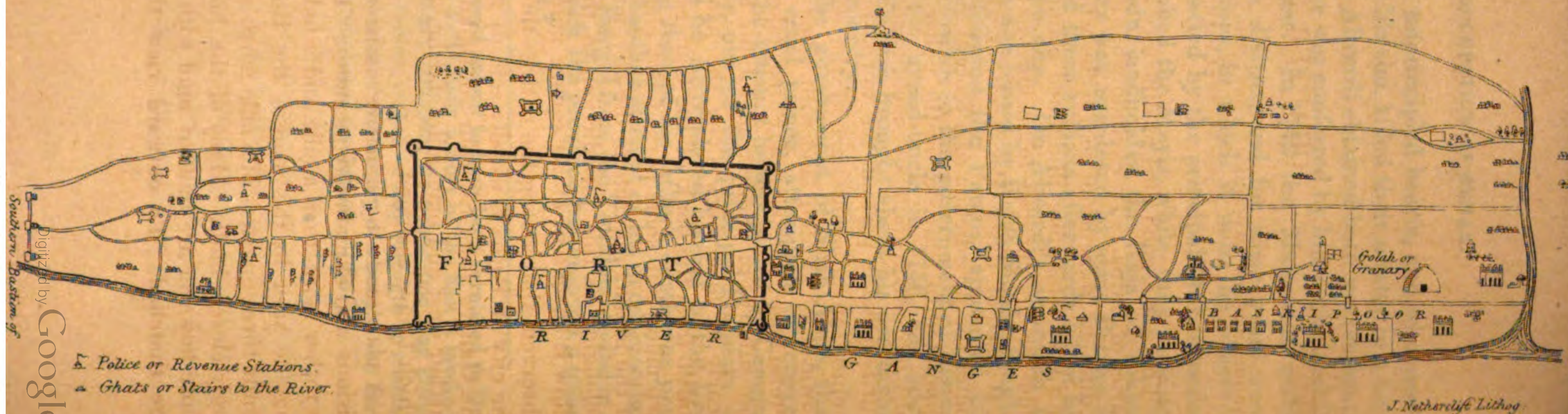
In 1638 Abdalla, governor of Behar, was accused of oppression, and Shaista was appointed in his stead. In 1658 the government of Behar was conferred on Kisser Sheko, son of the Prince Dara; and, during the whole reign of Shah Jehan, this district seems to have been tolerably quiet; nor did the disturbances in Bengal, which happened in the reign of Aurungzebe, extend this length. Owing to these disturbances Azim, the grandson of Aurungzebe, for some time held both governments; but after a time he was deprived of Bengal and came to reside at Patna, when his name was conferred on the city still called Azimabad, and the Moslems adhere to this denomination with more than usual care, owing probably to the prince having been an uncommon zealot. In the reign of Shah Alum I. the prince Azim went to Delhi, leaving Sirbullend Khan as his deputy. The prince was soon after killed in a contest for the empire. Soon after the prince Feroksere was proclaimed emperor in Behar.

The king Muhammed Shah appointed Fukered Dowlah Subah of Behar, but displaced him to bestow the appointment on Shuja Khan, the Subah of Bengal, who sent Aliverdi Khan as his deputy to Behar, then in the utmost confusion, and especially suffering from the violence of Namdah Khan the Mayi, and of Rajah Sunder Singha of Tikari. Aliverdi quashed this anarchy, and having as usual fleeced the rebels, acquired the title of Mohabutjung. In 1740 Sirafraz, who had succeeded his father Shuja as Subah of Bengal and Behar, coined money in the name of Nadir Shah then at Delhi, on which Aliverdi and his kindred, men of low birth, extreme

meanness, and the most unprincipled hearts, and who owed everything to Shuga and his son, killed their master in a very treacherous manner, and Aliverdi obtained both governments. The government of Behar was conferred by him on Zeineddin Ahmed Khan his nephew. In 1742 the Mahrattas under Balla Row invaded this district, and for some years committed horrible devastations, in which it must be observed that they were chiefly abetted by the principal Muhammedan family in the district, called the Mayis, while they were opposed by the chief Hindu landholder, the Raja of Tikari. Zeineddin in a few years was murdered by some Patans in the palace of Patna; and these ruffians afterwards killed his father and plundered the city. On Aliverdi's approach to punish the scoundrels he was joined by Rajah Sundar Singha of Tikari, and having defeated the Patans, appointed his grand nephew Surrajid Dowlah to the government of Behar. This prince succeeded his grand-uncle in 1756, and soon after by oppressing the English brought about his overthrow and the conquest of his country.

In the beginning of the government of Shah Alum, that weak, hypocritical, and cruel prince, attempted to recover Behar and Bengal. In the attempt he was joined by Camgar Khan of the Mayi family, one of the principal Foujdars of Behar. When he failed he surrendered himself to the British at Gaya, and hearing then of his father's death was proclaimed king at Patna. Another attempt of his in conjunction with Casim Ali to recover Bengal from the "infidels" ended in a similar disgrace, since which the province has enjoyed a quiet formerly totally unknown.*

* This historical sketch would appear to have been furnished to Dr. Buchanan by the natives, and as the early history of the East is involved in so much doubt and legendary tradition, its publication may either strengthen or refute other statements, so that we may at length be enabled to have a clear and accurate account of the history of a people who have undergone, and suffered from, numerous revolutions.—[Ed.]


PLAN
OF THE
CITY OF PATNA.
From a Drawing by a Native.
FORT
RIVER
GANGES
BANKIPOOR
Golah or Granary
Southern Bastion of
Police or Revenue Stations.
Ghats or Stairs to the River.
J. Netherclift Lithog.
London. 1838. W. H. Allen & Co. 7 Leadenhall St.

CHAPTER III.

TOPOGRAPHY IN DIVISIONS, EMBRACING THE HOUSES, POPULATION, TOWNS, VILLAGES, &c.

There is a good deal of difficulty in ascertaining the boundaries of Patna. To exclude what is without the walls would reduce its dimensions to a trifle, while the suburbs are built in a very straggling ill defined manner. I find it most suitable for my purpose to include in this section the whole of that part of Patna Pergunah, or Haveli Azimabad, that is under the jurisdiction of a Kotwal and 15 Darogahs, who are appointed to superintend the police of the 16 wards (Mahullah), into which the above-mentioned extent is divided. Each ward includes part of the town, but several of them also include an adjacent part of the country, consisting chiefly however of garden land with some low marshy ground that intervenes. The city of Patna, taken in this sense, includes the suburbs of Bakipur and Jafur Khan's garden, an extent nearly of nine miles along the bank of the Ganges. The width from the bank of the Ganges is on an average about two miles, but some part of the channel of the Ganges and of the islands opposite to the city, must be also considered as belonging to this jurisdiction, so that on the whole I shall allow it an extent of 20 square miles. It must however be observed, that among the natives the *gerdnawah* or extent of the city of Patna is usually said to reach along the bank of the Ganges from Sherpur to Baikunthapur, about 11 miles farther west and nine miles farther east than the boundaries which I have assigned.

A plan made by a native assistant will show the subdivisions and explain my meaning. The city within the walls is rather more than a mile and a half from east to west, (as may be seen by the plan in the Bengal Atlas, No. 15), extends three quarters of a mile north and south, and is exceedingly closely built. Many of the houses are built of brick, more however are built of mud with tiled roofs, but very few are thatched. To outward view they are exceedingly un-

sightly and slovenly, and are rendered peculiarly mean by the lower story towards the street, in even the best of them, being let for shops to low tradesmen or even to artificers, who are very careless. Within, many of them are no doubt neat, and according to the idea of the inhabitants very comfortable, as every one who has means to afford it resides in this part of the town, nor is it fashionable for the wealthy to have country houses. The Nawab Bakur Ali Khan has indeed a house in a suburb, but this was formerly occupied by an European gentleman, and, I believe, has been bought by the Nawab with a view chiefly to receive visits from Europeans, and his family resides in the city. Kasinath, a rich banker, is the only person, so far as I saw, that has a country house; and both the buildings and garden are neat, and of a respectable size; but, I believe, are used very rarely, and that only on festivals and entertainments, and his family constantly resides in the town. This predilection for the city would be hard to explain, as it is difficult to imagine a more disgusting place. There is one street tolerably wide that runs from the eastern to the western gate, but it is by no means straight nor regularly built. Every other passage is narrow, crooked, and irregular. The great street, when it breaks into sloughs, is occasionally repaired with earth thrown in by the convicts: the others are left to nature by the police, and the neighbours are too discordant to think of uniting to perform any work. Paving, cleaning and lighting, considered so essential in every European town in such circumstances, are totally out of the question. In the heats of spring the dust is beyond credibility, and in the rains every place is covered with mud, through which however it is contrived to drag the little one horse chaises of the natives. In the rainy season there is in the town a considerable pond or lake, which, as it dries up, becomes exceedingly dirty, and in spring is offensive.*

East from the city is a very great suburb, the chief part in which, called Marusgunj, is situated between the eastern gate and the river, and is the principal market. It contains many store-houses for grain. Most of the buildings, especially the store-houses, are built with wooden posts and walls made of straw-mats, with tiled roofs. Although almost the whole was

* Some efforts have since been made to correct these evils.—[Ed.]

burned to the ground last year, and although a similar accident usually happens once in five or six years, it has been rebuilt exactly on the same footing. Immediately above the town is a long narrow suburb extending almost four miles in length, but seldom half a mile wide, and there are many short interruptions from gardens; but one great street, lined in most parts on both sides with houses, extends the whole way, and near the city divides into two branches, which rejoin at the eastern gate. Many narrow crooked alleys extend on both sides of this road, and are lined with hovels of all kinds, mostly, however, having mud walls and tiled roofs, and some of them have two stories; but there are scarcely any respectable houses occupied by natives. The Nawab Bakur Ali has, however, as said above, a large house; Raja Kalyan Singha, last native governor of Behar, has two or three houses, which, from the caprice of enormous wealth, are now empty; and Raja Mitrajit, of Tikari, has built a house, where he occasionally resides. This part of the town seems to have risen in consequence of the European settlement, and the houses of the Europeans are scattered through it, chiefly along the bank of the river; while, no precautions having been taken, their dependents have huddled along the great road, and formed lanes and crooked passages between it and the gentlemen's premises, so that the access to several of these has become exceedingly disagreeable, and to some of them difficult. Notwithstanding that this is one of the chief European settlements in India, being the seat of a court of appeal, of a city judge and magistrate, of the collector of a very fertile district, of a custom-house, of a commercial resident, of an opium agent, and of a provincial battalion, the number of European houses is trifling, and they are so scattered that they make no show. One of them is a very elegant abode, and had it not been made to consist of two orders, one above the other, and both therefore too small, it might have been a fine piece of architecture; as it is, however, it is undoubtedly the best private dwelling that I have seen in India. The others are indifferent, and some of them very bad. Of the 52,000 houses estimated to be contained in this city it is said that 7,187 are built of brick, 11,639 are of two stories with mud walls and tiled roofs, 53 differ from the last in having thatched roofs, 22,188 are mud walled huts covered

with tiles, and the remainder consists of mud walled huts covered with thatch. Some of the roads in this quarter are kept in tolerable repair by the labour of the convicts, but the dirt, dust, and mud of the greater part of the suburbs are almost as bad as those of the city.

The town is very indifferently supplied with water. Near the river the supply from thence is abundant, but in the dry season the bringing it from thence is a severe task on the women, and in the rainy season it is very dirty and bad. Near the river the wells are deep, and the water which they contain is generally saline. Farther from the river many wells are good, and some of them not very deep, so that on the whole the people there are best supplied. One magistrate, some time ago, compelled the people to water the street, each person in front of his own house, and this, no doubt, was a general comfort for the whole, but in many particular cases was attended with hardship, so that this has been abandoned. The bank of the Ganges occupied by the town is tolerably high, and in most parts the town might be extended farther south than has been yet done, but all along its northern boundary is a tract of low land deeply inundated in the rainy season; this, however, when the floods subside, is very well cultivated, and I do not believe that it renders the situation of the town unhealthy.

A city nine miles long sounds large; but, when we come to investigate particulars, we shall be a good deal disappointed. It having been last year proposed to levy a tax on houses, the acting collector proceeded to make an enumeration, and the returns procured gave 45,867 houses, exclusive of those occupied by persons dedicated to religion. Two or three houses belonging to one person were often returned as one, which saved trouble, as the tax was to be laid on the value of each property. On account of this and of the religious houses, and a few that may be supposed to have escaped the vigilance of the surveyors, the number must be allowed to be somewhat more than the return given to the collector. The late magistrate had commenced an enumeration of the people, but it was left incomplete, and has not been continued. I am, therefore, under the necessity of proceeding by conjecture concerning the number of people in each house, and the addition that must be allowed to the number of houses re-

turned to the collector. On the first point, the average conjectures of all the Darogahs, each of whom had carried his investigation by actual enumeration to a certain extent, will give an average of six persons for each house, and the total number of houses, according to the conjecture of the Darogahs, amounts to rather more than 52,000. The whole population will, therefore, amount to 312,000, which I do not think liable to any considerable error. There are besides a great many persons, sepoys, camp-followers, travellers, boatmen, &c. whose number fluctuate; but is generally pretty considerable.

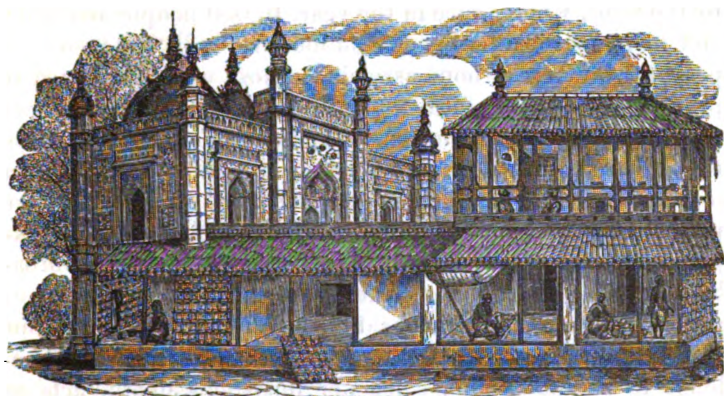
The principal road, especially in the city, is very much crowded; but there are no such multitudes of passengers going in and out as are to be seen near the large towns in England. A hundred yards from the southern wall of the city you are completely in the country, and within sight of it I found myself, in looking after the curiosities of the place, just as great a matter of wonder to the women and children as in the most remote parts of Behar. It did not appear that the villagers, at least the women and children, had ever seen an European, and they flocked round my palanquin with great eagerness.

The inside of the town is disagreeable and disgusting, and the view of it from a distance is mean. Indeed, at a little distance south from the walls, it is not discernible: there is no building that overtops the intervening trees, and no bustle to indicate the approach to a city. The view from the river, owing to the European houses scattered along its bank, is rather better, and is enlivened by a great number of fine formed native women that frequent the banks to bring water. Still, however, the appearance of the town from thence, especially in the dry season, is very sorry, the predominant feature being an irregular high steep bank of clay without herbage, and covered with all manner of impurities.

Major Rennell has given in the Bengal atlas a plan of the poor fortifications by which the city of Patna is surrounded; and, as ever since his survey they have been totally neglected, their condition is now to the last degree wretched. A very little pains would, however, render them a security against predatory horse, and would enable them to preserve the effects of all the vicinity from such a force. It is the common idea among the natives that the fort and city were built by

Azim, the grandson of Aurungzebe, and that Pataliputra had long been completely destroyed when that prince arrived; and, as I have before said, it would appear that in A. D. 1266 Patali had become a nest of robbers, and was then punished; but a fort was built; nor can I trace anything relating to it in Dow's history until the year 1611, when a convention of Afgan chiefs assembled at the place, which was then the capital of Behar. Farther, it would appear that about this time the town was not only fortified, but had within the walls a palace, where the Subah resided. The inscription also on the gate of the fort, dated in the H. 1042, attributes its erection to a Feroz Jung Khan. The vulgar opinion must therefore be a mistake, and takes its rise from the name of Azim having been given to the city. It is alleged, that until the Mahratta invasion, the city walls contained all the inhabitants, and its principal increase and prosperity seem to have been owing to the European commercial factories, for at one time the English, Dutch, Danes and French had factories here, and traded to a great extent, especially in cotton cloth. This trade has no doubt suffered, and although that of nitre and opium has increased, yet the parts of the town adjacent to the factories have declined; but then the city is said to have greatly increased, and the value of the ground in it, within these 15 years, is said to have doubled, owing to the difficulty of procuring a spot for building a house.

The Company's opium stores, a granary, and a few miserable brick bridges are all the public works that I have seen, except those dedicated to religion. In the middle of the city the Roman Catholics have a church, the best looking building in the place. Near it is the common grave of the English who were treacherously murdered by the orders of Kasem Ali before his final overthrow: it is covered by a pillar of the most uncouth form, built partly of stone, partly of brick. There are many *musjids*, or mosques, but none of them very large, and many of them are now let as warehouses by their owners. This is the case with the handsomest of them, which is built entirely of stone, and of which a view is annexed. It stands with one end to the street, and the house of a descendant of the prophet, who is stiled the *motawoli* of the mosque, is situated in front. This drawing will give an idea of the style of building in Patna, and of



Stone Mosque at Patna.

the manner in which it is disfigured by the wretched sheds built in front for artificers and petty traders. Although the owner has let his mosque for a warehouse, he is strenuous in his calls on the faithful to pray, and he is the loudest crier and the loudest prayer in the whole town.

The chief place of actual worship among the Moslems of Patna is the monument of Shah Arzani, about the middle of the western suburb. He was a native of the Punjab, and, after a long residence, died here in the year of the Hijri 1032. The proprietors are the *chelas*, or disciples of the saint, and not his descendents, and all of these holy persons have abstained from marriage. Kurimbukhsh, the present occupant, is the seventh successor in the office. He has considerable endowments, and gives food daily to from 50 to 200 fakirs. Every Thursday night from 100 to 500 pilgrims, Moslems and Hindus, many of them from a distance, come to intercede with the saint for his assistance, and make offerings. In the month Zikad there is an annual fair (Mela), which lasts three days. On the first, people apply to Shah Shujawol; on the second, to Vasunt; and on the third, to the great saint; the two former having been among his successors, and the latter of them, it must be observed, has a Hindu name. About 5000 votaries attend. Adjacent to the tomb is an *Imamvara*, where 100,000 people assemble with the pageantry used in cele-

bration of the grandsons of the prophet. Near it is a tank dug by the saint, where, once in the year, 10,000 people assemble, and many of them bathe. A public crier calls the people to prayers, but few or none assemble; those who are roused to pray by the crier perform their devotions on the spot where they happen to be at the time. I have not observed among the Moslems of Bengal or Behar any meetings in their mosques, such as we have in our churches, in order to have public prayers and to hear their scriptures either read or expounded. The only other place of worship among the Moslems at all remarkable is the monument of another saint, named Pir Bahor, which was built about 200 years ago, but it is only attended by a few in its vicinity. It at present belongs to a widow, who, since her husband's death, acts as *Pirzadah* for the families who were wont to require the assistance of the deceased.

The only places of worship at all remarkable among the followers of the Brahmans are the temples of the great and little Patanadevi, Pataneswari, or Goddess of Patana, *i. e.* the city. The great goddess is said to have been placed in her present situation by Patali, daughter of Raja Sudarsan, who bestowed the town now called Patna on his daughter, and she cherished the city like a mother, on which account it was called Pataliputra, or the son of Patali. The building is small, but avowedly recent, and erected at the expense of the priests. Far from acknowledging the story of Patali, these allege that their deity has existed here from the origin of things. The traces that can be considered as belonging to the Hindu city are exceedingly trifling. Everywhere in digging, very little else but broken pots, are to be found; and, where the river washes away the bank, many old wells are laid open; but nothing has been discovered to indicate large or magnificent buildings.

It need not be wondered, that so little traces of the Hindu city should remain, as the occupancy of men totally regardless of the monuments of antiquity soon obliterates every trace; and it is only in remote and wild parts of the country, that the ruins of buildings are allowed to remain undisturbed; or among nations very far civilized, that any attention is bestowed on the preservation of the monuments of art. Chehelsutoon, the palace of the viceroys of Behar, which has ac-

commodated many personages of royal birth, and which 50 years ago was in perfect preservation, and occupied by the king's son, can now be scarcely traced in a few detached portions retaining no marks of grandeur; and the only remain of a court of justice, that had been erected in the year of the Hijri 1142, is a stone commemorating the erection, which was dug up in the 1221 (A. D. 1807,) when a police office was about to be erected on the spot, where the other had formerly stood, and which in 79 years from its foundation, had been completely obliterated.

DIVISION UNDER THANNAH* PHATUKA.—The country may be divided into four parts. One consists of islands in the Ganges, which are very bare and sandy, but clear, and some part cultivated. 2ndly. The bank of the Ganges is high, exceedingly populous, and finely wooded. 3dly. Behind the town of Patna is a low country deeply inundated in the floods, and very bare and thin of inhabitants; but it is very fully employed, even such places as are covered with water throughout the year, being cultivated with *singgara*. 4thly. In the interior of the country is a rich tract of rice land finely cultivated, and well planted. The trees, as usual in this district, are chiefly mangoes and palms. There are 100 brick dwelling houses, and one thirty-second part of the whole are built of mud with two stories, and roofed with tiles; three thirty-two parts of the whole are tiled, although only of one story. The villages, as usual in this district and in Behar, are built of mud, and the houses closely huddled together, so as to render a passage through them, on an elephant, or in a palanquin, always difficult, and often impracticable. This is done from jealousy, to keep persons of rank from approaching their women; as in former times violence to any pretty girl that was seen, was not uncommon. The huts are naked and mean, and the narrow passages are very slovenly, so that the villages are disgusting; but in general they stand high, the clay of old walls adding annually to their elevation; for, when a house goes to ruin, it is levelled, and a new one built of fresh clay, which is more durable. In almost every village has been one or more mud forts, or rather castles, that is large houses

* The district is divided into *Thannahs* each *Thannah* forming a police station. This arrangement of Dr. Buchanan's has been preserved.—[ED.]

surrounding a square, and strengthened with turrets, a parapet and other such defences, and often with a ditch. Most of these are now in ruins, but some sre still entire; and both, in addition to the elevated situation of the villages, give them when viewed from a distance, a very picturesque appearance; but the extreme rudeness of the castles will not bear a near inspection, any more than the filth of the villages. The custom of covering the houses with gourds and pumpkins is not near so common in this district as towards the east, and contributes to render the villages more unseemly, the thatch especially being very clumsily disposed.

Phatuka at the mouth of the Punpun on its south side, and not on the north as represented in the Bengal atlas, is a large country town, and may contain 2,000 houses, and 12,000 people, with a considerable trade and manufacture of cloth. Where Major Rennell places Phatuka, is Shumushpur Jafurabad, a town with 300 houses, and some considerable religious edifices. It may be considered as a suburb of Phatuha. Baikunthapur is a town at least as large as Phatuha, but has not so many good houses, is rather in a state of decay, and is chiefly inhabited by weavers. It has an inn. The only other places that can be called towns, are Jethauli containing about 150 houses, and Lokna containing 200 houses.

The moslems have no place of worship at all remarkable. Among the Hindus the Ganges is the chief place of worship; but no one part is very remarkable, although immense multitudes bathe in different parts on the Kartiki-sudi-chauth, on the the Kartiki Purnama, on the Maghi-Purnama, and on the Vishuwa Sangkranti; but on these three last occasions 200,000, 2,000, and 25,000 are supposed to bathe at Phatuha and Baikunthapur alone; and near the former, at the junction of the Punpun with the Ganges, about 10 or 12,000 bathe on the Dwadasi of Sravan, or Bamana Dwadasi, in commemoration of an incarnation of Vishnu in form of a dwarf. This place is very holy, and almost every person going to Gaya from the east stops at it, and performs the ceremony called Sraddha in commemoration of his ancestors, and some priests obtain a support by repeating the ceremonies.

Baikunthapur is a remarkable place of worship. The mother of Mān Singha died at this place, and, where she was burned, a Baradwari, or hall with 12 doors, was built by her son, and

several temples were at the same time endowed. On this occasion the governor was favoured with a dream, in which he was informed of the place in the river, where Jarasandha had one day thrown an amulet (*yantra*,) that he usually wore on his arm, and such dreams being always true, the amulet was found. It is a stone representing a *Lingga* adorned with four human heads. It is alleged, that at the Sivaratri 200,000 people assemble.*

NOUBUTPUR.—This is a fine rice country, but not subject to inundation; it is well planted. There is only one brick house. There are 60 mud-walled houses of two stories, 15 covered with tiles, and 45 with thatch, so that architecture is no ornament to the country.

Noubutpur is a close built town, containing about 200 houses, and many shops, but nothing remarkable. Sheykhpurah is much such another place, but has no shops. Close to it is a suburb containing 90 houses, and called Nezampur. It has no market. Rampur and Korai are two small market towns, each containing about 100 houses.

BAKIPUR JAYWAR.—The country around the cantonment of Danapur is very fine, and consists of four parts. 1st. Some low sandy banks (Diyara) adjoining to the Ganges. 2d. High land on the bank of the great river, not fit for rice, but finely planted and cultivated, and this part is peculiarly ornamented by the European buildings in and near the cantonments. This part, although exactly of the same nature with the Tariyani of Phatuha, is not called by that name. 3dly. A low tract south from the river some way, and called Chaongr. It entirely resembles the rich lands so called near Munggeer. 4thly. The southern parts of the division entirely resemble Noubutpur.

Danapur is by far the principal place, and independent of the military, and the followers attached to corps, and those that accompany them, contains a great many people. In different market places scattered within the boundaries of the cantonment, and under military authority, are said to be 3236 houses. These markets are rather better built than usual country towns, and afford many more comforts for

* On a certain day 10,000 women assemble and bathe at a *Ghat*, in the west-end of the city.—[ED.]

the Europeans than Patna, which in that respect is a very wretched place; the gentlemen, who reside in Patna, are supplied with almost every necessary from Danapur. The military buildings are very grand, especially the barrack for European soldiers, which is a magnificent and elegant structure. The officer's barracks, although inferior to the other, are still very fine buildings, and of great extent. Many officers of the staff and others have built neat and commodious habitations in the vicinity, and the grounds round them are well laid out, while the roads in the vicinity, and through the cantonments, are tolerable, so that the whole appearance is superior to that of Patna. Of the native houses in Danapur forty are built of brick; one quarter of the whole has two stories with mud walls and tiled roofs; one half of the whole has mud walls and a tiled roof, but are of one story; one quarter consists of mud walled huts with thatched roofs.

Phulwari, including Munshurgunj, is a good country town, containing 1700 houses, one of brick, and many of them, although constructed of mud, have two stories, are covered with tiles, and are very large. These belong chiefly to Muhammedans of rank and education. In this town is a mosque, a great part of which is built of stone and of a strange structure, but not handsome nor very large. Its gate built of red stone from Agra is the best of the work. Digha, on the Ganges, has 500 houses, and is remarkable for boats fitted for accommodating European travellers. The other places, that can be called towns, are Sekundurpur, Karera Harisangkarpur, and Lesleygunj, containing each from 200 to 125 houses. The last, founded by a Mr. Lesley, was once large, but has of late gone to decay. Besides those in Danapur, there are in this division 30 dwelling houses of brick, and 150 of two stories with mud walls and covered with tiles.

The mosque above mentioned at Phulwari, is the only place of worship at all remarkable among the Muhammedans. Its sanctity, however, is not in high esteem, and at two holidays it does not attract above 1000 votaries. A Moulavi uses it as a school (*Mudursah*), in which he instructs youth in Arabic lore. The Hindus possess no place at all worth notice.

Sherpur division consists of two parts. One high along the banks of the rivers, not fit for rice, but finely planted,

exceedingly populous and well cultivated. 2dly. Low land towards the south, which during the rainy season is overflowed through creeks. This is bare but highly cultivated, but although it is chiefly reserved for wheat and barley, some part has been rendered fit for rice. Maner contains 1500 houses, Sherpur contains 1000, Rapura 600, Saray 150, and Lodipur an equal number. Except the buildings at Maner, there is no remain of antiquity.

SAHEBGUNJ GAYA is a beautiful country, finely varied with scattered hills and rocks, but the soil is in general rather poor, and requires much artificial watering, on which towards the west much pains have been bestowed, especially on the Tikari estate. Towards the east and south the land has been a good deal neglected, and in that quarter there still remain some extensive woods. The cultivated country is finely planted, but architecture has done little for its ornament. The great buildings of former times are too far gone in decay to make a show, and the buildings of Gaya are so huddled together that they cannot be seen to any sort of advantage. The Raja of Tikari's house is much concealed by the earthen ramparts of the fort, by which it is surrounded, and is built in a bad style. Still, however, its magnitude is suited to his great fortune, and is an ornament to the country; but in the two districts it is the only country residence belonging to a Zemindar, that can be considered as fit for the abode of a gentleman, the wretched subdivision of property having banished every elegance, without having introduced neatness or comfort. The profits of superstition have however introduced some luxury, and there are in this division 2500 houses built of brick and stone, and 1200 of two stories with mud walls and tiled roofs, 500 similar houses have thatched roofs, one thirty-second part of the dwellings are huts, having clay walls and tiled roofs, and fifteen-sixteenths are huts, having mud walls, and are thatched, four parts with grass, and eleven parts with straw. There are about 500 of the round hovels like bee hives, which are called *marki*. In this division Nawada and Sheykhpurah, especially towards their southern sides, the villages are rendered somewhat less irksome to the view, by having near the houses arbours covered with leguminous climbers, which conceal part of the dirt and misery, and by their verdure and flowers are very ornamental.

The town of Gaya, the capital of the district, consists of two parts: one the residence of the priests, which properly is called Gaya; and the other the residence of lawyers and tradesmen, which was originally called Elahabad, but having been very much enlarged and ornamented by Mr. Law, it is now called Sahebgunj. The old town of Gaya stands on a rocky eminence between a hill and the Phalgu river, and Sahebgunj is situated on a plain, on the bank of the Phalgu, south from a hill named Ramsila. Between the two towns was an open sandy space called the *Rumnah* or chase, but the court houses have occupied a part of this, and the remainder is taken up by the houses and gardens of the few Europeans at the station. These are small buildings, and the grounds and roads in the vicinity are not near so good, as might have been expected from the number of convicts, especially as they have not been employed at a distance. The buildings for the accommodation of the Zila courts are good, and that intended for the courts of circuit when finished, will be handsome. The streets in Sahebgunj are wide, perfectly straight, and kept in good order, although not paved; and in general there is a double row of trees, leaving in the middle a road for carriages, with a foot way on each side. The foot ways, however, are usually occupied by hucksters, or by part of the families and furniture of the adjacent houses; for in good weather many of the men sleep in the street, and many of them work there at different trades. The buildings are not equal to the design of the town, the greater part of them being mud walled huts of one story; but in general they are covered with tiles. This indeed is much better than is usual in Bengal, and there are some good brick houses and neat gardens, especially one belonging to Raja Mitrajit of Tikari: on the whole, Sahebgunj is the neatest place seen in the course of the survey. This town also has an hospital for the reception of sick natives. Every one that applies is received; but almost the only patients are destitute pilgrims, taken ill on the spot, and persons who have suffered violence, and are placed by the magistrate in charge of the surgeon. Two gates like triumphal arches, and evidently planned by an European, are standing at two ends of a street; but although they have been a very short time built, the people are by no means agreed concern-

ing the person by whom they were erected, some attributing them to Mr. Law, and some to Mr. Seton,* nor is their use known. It is probable that they were intended to form an inn (*saray*). A wall behind each side of the street, and a guard at each of the gates would have secured the property of the lodgers, and the street would have been formed of chambers for their reception.

The old town of Gaya is a strange looking place, and its buildings are much better than those of Sahebgunj, the greater part of the houses being of brick and stone, and many of them having two or even three stories. The architecture is very singular, with corners, turrets and galleries projecting with every possible irregularity. This style of building, and its elevated situation, renders a distant view of the town picturesque, although the small number and size of the windows produce a gloomy appearance. A near approach fills with disgust. The streets are narrow, crooked, dirty, uneven, and often filled with large blocks of stone or projecting angles of rock, over which the people have for ages clambered, rather than take the trouble to remove such impediments. In some places an attempt has been made at paving, and in the rainy season it may be of use to keep people from being ingulphed; but in dry weather the inequalities of such rude work harbour all manner of filth. The best houses towards the market places have sheds erected in front of the lower story, and these are let to petty traders and artificers, who keep them in the most slovenly condition. In both towns these galleries or shops are often painted very gaudily with strange caricatures, although not meant for such, of beasts, men and gods; but so careless are the people, that scarcely any such gallery exists, in which some corner is not appropriated for boiling a pot; as far as the smoke reaches, the fire is allowed to cover with soot the painting and tinsel. The two places constituting Gaya are said in an enumeration made by Mr. Law to have been found to contain 6000 houses, and it is supposed, that 400 have been since added. The place is extremely populous, a great many strangers being

* Mr. Seton was a man of peculiar talents and originality of character; he was much beloved by the natives, and wherever he was stationed he effected much good.—[Ed.]

constantly on the spot, and the pilgrims and their followers often amount to several thousands. When Sahebgunj was built, there no longer existed an occasion for fortifications, but old Gaya had been often attacked, and sometimes plundered. The sanctity of the place would have been no security against Mahrattas' rapacity; and, when these invaded the district, the priests boldly formed themselves into 14 companies, to each of which was entrusted the defence of an entrance into the town. Except at these entrances the houses and a few walls formed a continued barrier, and the projecting angles, and small windows of the houses formed a strong defence, so that the Mahrattas were on all occasions repulsed. Many Zemindar Brahmans, and other warlike persons retiring to the town with their families and effects, gave a great addition to the power of the priests. During the subversion of the Mogul government the same vigour saved the town from the rapacity of Kamgar Khan, chief of the Mayis, who would have gloried in the spoils of the infidels. Gaya contains many religious buildings. The reflection of the sun's rays from the rocks, by which it is surrounded, and from the parched sands of the Phalgu, render Gaya uncommonly hot, and in spring it is involved in perpetual clouds of dust.

Buniyadgunj, opposite and a little below Sahebgunj, contains 1200 houses, chiefly occupied by weavers. Tikari, the the residence of Raja Mitrajit, contains about 500 houses, built in imitation of Sahebgunj, and is adjacent to his fort or castle. The fort has a good earthern rampart with bastions fit for guns, and a large wet ditch; and, although now rather neglected, might very easily be put in complete order, and has resisted many attacks. Kinar, east from Shahebgunj seven cos, contains 400 houses. Besides these Angti, Koch, Futehpur, Dekuli, Mawak, Baona, Majurahanda, and Sulimpur are small towns containing from 250 to 100 houses.

The chief place of worship among the Moslems is the Imamvara north from Sahebgunj, where on day of the Kurbula about 20,000 people assemble to celebrate the grandsons of the prophets; but many of the most active performers are Hindus.

The Hindu places of worship are numerous, and of great celebrity, but aware of the extent to which the history of them must run, I commence the account with hesitation. I shall

begin with Gaya, mentioning first what conjectures offer concerning the history of this worship. 2dly. I shall describe the pilgrims. 3rdly. The priests. 4thly. I shall describe the places to visit which licences are required, and finally I shall notice some places of less reputation.*

In the Puran called Vayu, supposed to have been written by Vyas, but not one of the 18 most celebrated works of that name, is a portion called the Gaya Mahatma, which gives a long account of the place; but, as usual, it is a monstrous legend. A certain infidel (Asur) in the earliest age of the world (Satya Yug)† by his sanctity and severe mortification on the mountain Kolahala, obtained through the favour of Vishnu the power of sending to heaven whatever person approached his body, which was so pure, that it freed from sin whoever approached. By this means, besides other evils averted, the whole sinners on earth were saved; on which the judge of the infernal region (Yama), being deprived of his authority, united with Indra king of heaven, and other Gods, and complained to Brahma, who repaired to Vishnu for advice. In consequence of this, it being necessary to use caution, Brahma told Gaya, that he wanted a favour. The infidel monster, who was of an enormous size, was pleased by the civility of the god, and promised to grant whatever was asked, on which Brahma besought leave to give an entertainment on the pure body of the giant. Gaya according to his promise consented, and lay down at the south-west corner of Kolahala, at the place now called Gaya. Brahma created 14 Brahmans,—Gautama, Kasyapa, Kautsha, Kausika, Kanwa, Bharadwaja, Ausanasa, Batsya, Parasara, Haritkumara, Mandabya, Golakshisattama, Vasishta, and Atreya, and gave them a great feast. When the feast was over, the infidel was about to rise, but the Lord of the infernal regions by the desire of Brahma placed over him a large rock named Dharmasil, which was moreover the wife of a holy Brahman named Marichi Muni. Though the rock was very heavy, it could not keep the monster quiet. Then Brahma desired all the gods male and female, and

* The Editor has been obliged to abridge a great deal of this portion of the work.

† See Introduction.

all the saints (Muni) to leap upon Gaya; but all were unable to repress his struggles, upon which Brahma went to Vishnu in heaven, who created another Vishnu, and lent this resemblance of himself to Brahma, who threw it on the gigantic Gaya, but without effect. Brahma then brought Vishnu himself, who, when he came, assumed two new forms, Janardan and Pundari Kaksha, and placed them on the giant; but he still threatened to rise. Vishnu then assumed the form of Gadadhar (mace bearer), and stood on Gaya, but without effect. Brahma then made three forms of himself, Kedara, Kanakeswara and Gajarupi; the sun made also three forms of himself, Uttaraska, Dakshinarka, and Gayaditya. These six incarnations mounted on Gaya, as did also the goddesses Lakshmi, Sita, Gauri-Manggala, Gayatri, Sabitri, Trisandhya and Saraswati. Gaya now became quiet, and said, that he would do whatever Vishnu desired, if they would give him more power. On which Vishnu put his foot on the head of Gaya, and all the deities promised to reside upon him, and that the whole extent of his person, 10 miles in length, should be called Gaya Kshetra. Whatever pilgrims made offerings over his head, Gaya Sir, which extends two miles in diameter, should procure the immediate admission of their ancestors to heaven; while those, who worshipped on any part of his body, should recover from all sin, even from the murder of a Brahman. The usual ceremonies however performed, both on the head and body, are done entirely with a view to the relief of the ancestors of the votaries.

The priests of Gaya called Gayawals are descended from the 14 Brahmans created by Brahma on the occasion, and have no sort of communion with the other persons of the sacred order. The infernal Lord, when he attempted to hold down Gaya, brought from his dismal kingdom certain Brahmans, who had been great sinners, but who had expiated their crimes by punishment. From these Brahmans are descended a class of priests called in the language of men, Dhamin, but Dhanushka (archers) in that of the gods. These priests perform the ceremonies at two of the places of pilgrimage situated on the body of Gaya, and named Pretiya, or the abode of the damned souls, or devils.

It is acknowledged by all, that until about five or six centuries ago, Gaya, as a place of worship, was in comparative

obscurity; and it is probable that the present legend was about that time invented, and adapted to current opinions, since which the number of pilgrims has been daily increasing; but it is within the memory of man since the Temple of Gadadhar was founded, and this was the first large building that was erected. The only other temple of note, the Vishnupad, is still more recent. Several inscriptions remain of about the period to which I have alluded as the probable era of Gaya's coming into great repute; but it is to be remarked, that they are by persons of no considerable note, and in general refer to places of worship that now do not form a part of the regular pilgrimage, and some of them have even been entirely deserted.

Although the number of pilgrims has been gradually increasing for these five or six centuries, there continued great checks on it until Mr. Law introduced many new regulations to give them protection. At many different places on approaching Gaya the pilgrims found custom-houses, erected by every land-holder or petty officer of government, who had power enough to compel them to pay contributions, for which there was no rule but the means of payment and the power of exaction. Mr. Law therefore abolished the whole of these custom-houses, and having ascertained that four sorts of pilgrimage were usually performed, he fixed a certain sum to be paid for a license for each. One class of pilgrims visits only one place, and on receiving a license to visit this the votary pays 2 rs. 1¾ anas; another class visits two places, and pays 3 rs. 5¾ anas; a third class visits 38 places, and pays 6 rs. 4¾ anas; the fourth class visits 45 places, and pays 14 rs. 2¼ anas. Deductions are, however, made on all the licenses to Nepalese, who are not numerous, and on the highest licenses to persons who bring water from the Ganges to pour on the sacred places, who are considered as holy, and who are generally poor. These four classes of licenses are marked by seals of different colours, by which alone the persons, generally employed as a check on imposition, know the one from the other; and there is strong reason to suspect that many frauds are still committed, although there has been of late a considerable improvement of revenue. But the duty to Government is a small part of the pilgrim's expense. The Bengalese and Mahrattas are by far the most numerous vo-

taries. The former usually content themselves with the two lower descriptions of pilgrimage, and the offerings, which they make to the god, consist of rice, barley-meal, or wheaten flour unboiled. The Mahrattas more commonly perform the two most numerous classes of pilgrimage, and their offerings are boiled. A certain description of Rajputs furnish the offerings, by which they would have a considerable profit, as they charge high, but they pay a large share to the Gayawal Brahmans. The cost of these offerings is, however, a trifle; the chief expense consists of the presents (*dakshina*), which must be made to the priests. The Bengalese, in fact, give chiefly grain, brass vessels, silver coin, and cloth; but sometimes they present cows. The presents nominally are in general quite different, but are trifles held in brass vessels covered with cloth, which in reality compose the most usual value of the present, and are sold to the next votary that comes. The Mahrattas give money, jewels, plate, fine cloth, elephants and horses. The very lowest person, performing his devotions at one place, cannot spend less, including duties, than 3½ rs.; those who worship at two places cannot spend less than 5 rs., but many spend 100 rs. The lowest rate of expense at the 38 places is 30 rs., and few there exceed 40 rs. The Bengalese, who worship at 45 places, usually expend from 40 to 200 rs.; some, however, spend as much as 500 rs., and some few great men have gone so far as 5,000 rs. Almost all the Mahrattas worship at the 45 places, and several every year give 5,000 rs., while great chiefs expend 40 or even 50,000 rs. These expenses are exclusive of the charges of travelling, and of what is exacted by numberless solicitations to which the pilgrims are exposed. Every one, so far as he is able, feeds the Brahmans who attend. No person can possibly go through the 45 places in less than 15 days, and persons of rank take from one to three months, during which, from morning till night, they are not a moment free from the most clamorous solicitations of religious mendicants, from 200 to 300 of whom, besides the priests, hover round the place with incredible diligence and importunity.* Besides the 45 holy places to which a license is necessary, there are besides several

* Gaya and its neighbourhood is filled with convents of different religious orders of Hindooism.—[Ed.]

others which pay no duty to Government, but are much frequented, and never without expense. When the votary has made his offerings and performed all his ceremonies, the priest that attends him binds his thumbs together with a garland, and says that he will fine him on account of his ancestors. When the fine is paid, the Brahman unties the garland, and declares that the ceremonies have been duly performed; nor are the ceremonies considered as of any effect until this declaration has been made. Formerly it was the custom for the priest to keep the votaries' thumbs tied until he consented to give a sum that was considered adequate to his circumstances; but Government has declared that all contributions must be voluntary, and the collector of the duty or magistrate will, on complaint, compel the priest to perform his duty, and to accept of whatever the votary pleases. People, however, from distant countries, who do not know our customs, are still often much abused, of which, while on Preta Sila, I saw no less than two instances, two decent Brahmans from Malwa applying to me for assistance: one was stript even to the skin, and had his thumbs tied; the other was sitting in despair at the foot of the hill, the sum demanded being so exorbitant that he would not venture to ascend. The checks, however, on this violence have rendered it much less frequent, and have given great satisfaction, not only to the votaries, but to many of the more moderate priests, who perceive that the security given to the votaries has greatly increased their number. This increase seems still to be going on, as will appear from the statement in the appendix, with which I was obligingly favoured by Mr. Gilanders, who has charge of the collections.* I believe, however, that the increase is not so great as would at first sight appear from viewing that statement, as new regulations have probably reduced fraudulent visits, although I am inclined to think that many are still made. It is usually supposed that the number of pilgrims and their attendants, who in ordinary years visit Gaya annually, is not less than 100,000, and 30,000 pilgrims would assuredly have less than 70,000 followers, although some of the great Mahrattas have rather armies with them than guards; but when several of

* These collections are now I believe abolished.—[Ed.]

these come, as has happened this year, the number of visitants is reckoned to be double that above stated.

I have already mentioned that the two priesthoods, the Gayawals and Dhamins, are attached to this place of worship, and in the account of the people I shall give an account of their customs. I here shall confine myself to their conduct as priests. The Gayawals are very numerous. None of them have any learning, so that they are unable to read the necessary forms of prayer, and for that purpose employ Brahmans of Sakadurip, Kanoj, and Srotryas, who are called Acharyas, are allowed a very slender pittance, and are severely exercised. A Gayawal who has much employment requires the assistance of three or four Acharyas, while one of these readers serves for three or four of the Gayawals who are little employed. Formerly there was a constant and miserable scramble among the Gayawals for customers, and the first who could lay his hands on a votary considered him as his property; but of late an order has been issued that the votary should be allowed to select whatever Gayawal he pleases, which has tended very much to produce peace, although there is no possible means of avoiding numerous squabbles. The Gayawals are not only ignorant, and do not affect any sort of severity or asceticism in their conduct, but many of them are notoriously very dissolute in their manners.

The Dhamins, who give one-fourth of their profits to the Gayawals, and who receive fewer and less valuable presents, have been under the necessity of applying more to study, and being unable to hire readers, are themselves able to read the ceremonies; but none of them attempt any other science. Each man officiates by turns at the different temples belonging to the order, and takes his chance of the profits that occur in his turn of duty. They have no more affectation of virtue or sanctity than the Gayawals, and poverty alone prevents them from being equally dissolute.

The influence of both depends entirely upon the power they are supposed to possess by birth, the whole efficacy of the ceremony depending on their pronouncing it duly performed. On this occasion even the most learned Pandit or greatest prince, when he makes his offering, must bend down and receive on his head the foot of an ignorant dirty fellow.

The places of worship to which licenses are granted con-

2



Very strange Image in the Gateway of a Temple near Vishnupa.

1



Gayeswari or Jagadamba.

3



Female Image found near No. 2.

London. 1838. W.H. Allen & Co. 7 Leadenhall St.

sist of 1 of first class, 2 of second class, 38 of third class, and 45 of fourth class.

The whole channel of the Phalgu, according to the Brahmans, from Brahma Sarobar to Uttarmanas, a distance of about half a mile, is reckoned equally holy. Four stairs have in this distance been made to facilitate the descent from the town, the bank being high, steep, and rocky. The stairs have a good effect when viewed from a distance, but have not been so contrived as to deprive the pilgrims of the merit of enduring fatigue in the ascent. One of them near Vishnupad having gone to ruin, has been lately rebuilt, I believe by Raja Mitrajit. The stair consists of granite, is of a fine width, on its summit is a gateway with a gallery for music (Nahabutkhana), and were not the steps much too high, it would be a fine work. A Pandit from the south of India told me, that before the old gateway was removed, he saw in the wall a stone containing an inscription, which attributed the work and a temple of Surya to Pratapa Rudra, well known to have been the last Hindu king of Warankol, and of whom I have given some account in my journey to Mysore. In the present gateway has been built a very strange female image below which is an inscription in the Telangga character, which mentions that in the year of Salivahan 1444 (A. D. 1521) the mighty hero, Krishna Deva, and his wife Tirumala Devi, had made some offerings. There can be little doubt that this prince is Krishna, the great king of Vijayanagar, often mentioned in my account of Mysore; and he must have sent here to certify his vanity to the barbarians (*Mlechha*) who then occupied this country. It is probable that his messengers took the first image which they found, and carved their inscription on the pedestal. Had they made an image on purpose they would probably have given it some form that is worshipped among the orthodox, as Krishna certainly was; but this image is so strange, that no one whom I have consulted pretends to guess at what deity it is intended to represent. On the outside of the same gate, towards the river, has been placed an image representing a man, one of whose legs is in the mouth of a crocodile of the Gangetic kind. This may represent a story of an alligator swallowing Nanda, the father of Krishna, which is to be found in the Bhagwat. In the same place is a female image standing, with a winged man flying below her. North from thence

some way is the most lofty stair, (Gayatrighat) but it is exceedingly rude, and was built 10 or 12 years ago by a widow named Gangga Bai. The other two are still inferior works.

Vishnupad is by far the most celebrated place of worship, and most elegant structure; but, as there are many other buildings dedicated to religion within the same enclosure, I shall at once give an account of the whole. The first entrance in approaching this sacred place is by a low and narrow door at the end of a dirty lane. This door leads into a small narrow court paved with stone, and having on the right hand, upon entering a small temple called Gayeswari. This is no doubt the Gram-devata* of Gaya town; but it is now alleged, that the image was placed here by Brahma at the first formation of the place. No tradition remains concerning the founder of the temple, which I am assured is quite modern; but the priests here seem totally unconcerned about their benefactors; or rather do not consider as such those who from vanity, or dread of the gods, erect temples, which are of no use to the priest. The image under a tree would just have answered his purpose as well, as placed in a temple of marble. Many images, similar to that worshipped as Gayeswari are scattered through this part of the country, but are usually called Jagadamba. They represent the destructive female power in the act of killing a man springing from the neck of a buffalo, the head of which has been separated. She is accompanied, as usual, by the lion, the emblem of the Syrian queen or Cybele, and I think it probable, was originally intended to represent Semiramis, who seems by the natives to have been usually confounded with the Syrian queen. On the threshold is a rude inscription, and in the outer wall has been built a mild female figure called Gayakumari, or the maid of Gaya, which has probably been intended to represent some female of the sect of the Buddhas.

At the far end of this court you pass through a door about five feet high and two wide, and this door also leads into a long narrow court paved with stone. On the right, you first come to a building called a *chattar*. A vile stair leads up to a small court surrounded by cloisters, intended for the entertainment of Brahmans. Were they tolerably clean, some of the apartments would be handsome; but they are to the last

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* The *Gram-devata* is the tutelar deity of the village.



Two Stones each containing Two Images in the Sannyasis House,_ north from Gadadhar;_ probably 4 of the 8 "Ashtasakti."



J. Netherclift Lithog.

London. 1838. W. H. Allen & Co. 7 Leadenhall St.

degree slovenly. In one of them are placed three statues of white marble, not so large as the human size, and clothed in dirty yellow cotton cloth. Two are standing, and represent Narayan and Lakshmi in an orthodox manner. The third is seated, and represents Alhalya Bai, the lady who erected the Vishnupad, and this building. The statues and marble were brought from Jaypur, where the arts are supposed to be in the highest perfection, but the images, except that they are polished, are miserably rude.

Beyond the *chattar*, on the same side of the court, is another building called a *dharma-sala*, and built by a contribution of the Gayawals, as a place where the pilgrims may entertain them. Opposite to these, on the left side of the court, is a convent (*math*,) where three Mahantas of three orders of the Dasnami-sannyasis reside. These are the owners of Gayeswari, and divide the profits equally; but one of them, the Mahanta of the order of Giri, is a deputy of the great Mahanta at Buddha-Gaya, and gives the larger share of his profits to his chief. The Mahantas of the orders of Puri and Bharati are independent. In this convent have been built two stones, each containing two female images, that were probably once united, as the figures, which they contain, belong to a set of eight, that are very often found united, and that collectively are called the Ashtasakti. There are also lying in this convent two stones containing inscriptions, written in a kind of Nagri, of which my people cannot read the whole. The former contains a very indecent figure, and is very strange. The characters of the first line are reversed, like those on a seal, and have probably been cut by a seal engraver, until the error was discovered. Then follow 15 lines in a similar character, which my people cannot read. Towards the end the inscription is Sangskrita, and the characters more intelligible, but three Pandits, whom I have assembled, seem very doubtful about its meaning. So far as they seem to understand, it would appear, that Jay Singha, a petty Raja of Kasmir, placed here the impression of the feet of Dattatreya, which was hid by the Sannyasis from my sight, but is kept in the convent. The other inscription is more distinct. In the year of Sambat 1682 (A. D. 1625) Sri Kalyan Ram, son of Narayan Das, commander of some fort, having gone to Kasi, came to Gaya, and built a stair.

Beyond these buildings the court enlarges on the left into

a considerable area, in the centre of which is placed the temple of Gadadhar. The image is supposed to have been placed here by Brahma, but the temple is not one of the holy places, where offerings are made to please Gaya. The temple of Gadadhar is next in size to that of the Vishnupad, and is very rudely built of granite. It consists of a kind of slender pyramid or spire called a *mandir*, which contains the image, and of a flat roofed porch supported by several rows of pillars, which is called the *natmandir* or *sobha mandhap*, and into which infidels are admitted without scruple. On one of the pillars in this porch is engraved an inscription, which contains no date, has no reference to the temple, and the persons mentioned seem to have been of no note. The image exactly resembles many of those which are most common about the temples of the Buddhas, and which in most parts of the district are worshipped as Vasudeva, or as Lakshmi, although they are males, or as Narayan, or as both Lakshmi and Narayan, although one deity alone can be supposed to be represented, the figures at the sides being evidently attendants, holding fans made of the Thibet bull's tail. Farther it must be observed, that this individual image could not have been erected by any person of the sect of Vishnu, as it represents a person with a lingga on his head, exactly in the style of the Janggams of this country, and must have been intended to represent either some worshipper of Siva, or to denote the power of the great God over some inferior deity. It could never therefore have been originally intended as the image to be worshipped as Gadadhar, an incarnation of Vishnu, and has been probably taken from some ruin. The present temple was built about 100 years ago; but, having gone to decay, was lately repaired by Madan Datta of Calcutta. There would appear to have been another temple previous to that now standing, and in the time of the heretical Palas, this former temple was probably the chief place of worship at Gaya.

In the area round Gadadhar are scattered many images. One in most respects resembles Gadadhar, but instead of having on his head the lingga, as an emblem of Siva, he has at his feet a bull, which is an emblem of the same god, and this confirms my opinion, that the image of Gadadhar is not the original idol, which should have represented a form of Vishnu, but is some image that has been taken from a ruin; is said to pre-

1



On a Stone beam in the Gate of Vishnupud at Gaya.

2



Ramchandra. near Gadadhar.

3



Gadadhar.

J. Netherclift Lithog:

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sent Ramchandra; but has none of the emblems, by which the orthodox distinguish that object of worship, while it has on each side the lion rampant of Gautama, and I have no doubt represents that lawgiver. The side of the area of Gadadhar next the entrance is occupied by the convent of Sannyasis above-mentioned. The side most remote from the passage is bounded by the stair leading down to the river, which I have lately described. The other side contains two buildings: 1st. A *dharma sala*, or place of entertainment for holy men, which was built by Ray Ballabh, son of Raja Ray Dullabh, the Company's Dewan during the government of Mr. Hastings. In the wall of this is built a female image with an inscription. It must be observed, that this female has in her hands exactly the same emblems, with that seated on the bull in the Sannyasis convent; but she is standing, and has on one side a lion, and on the other a jackal. The inscription is dated Sambat 1232 (A. D. 1175) in the 14th year of Sri Govinda Paladeva, which is 17 years before the Muhammedan conquest. It would appear from this inscription, that Bidyadhar, grandson of Ullan an untitled person, came to Gaya, gave daily 16 *kahan* of cowries to the Dwijas, took to witness 50 worshippers of Vishnu especially Nrisingha, Sridhar and Devadhar, from Tăpābăn, and appointed Raghav, Srikara Stoka, Damodar, Katidhar, and Risho Deva to manage the payment. The inscription was engraved by Kundes Kajsayi and Jay Kumar. In the line transversing the above some person not yet known, says, that he inserted an image of the feet Dattatreya, taking to witness Someswar, Padmanabh, the Devatas, and Dwijas. In the whole there is not the smallest allusion to the accompanying image, which had probably therefore been taken from some ruin. 2nd. The other building is the residence of the haughty spiritual guide of the Gayawals, into which I was not permitted to enter.

From this area around Gadadhar there is a narrow winding passage into the area, which encompasses the Vishnupad. This passage is enclosed by small rude buildings, in one of which is an image not worshipped. On a rude pillar at the the door of this are several inscriptions, which have been cut at different times, and are partly in a kind of Deva Nagri, partly in the Tailangga character. One in a kind of Nagri,

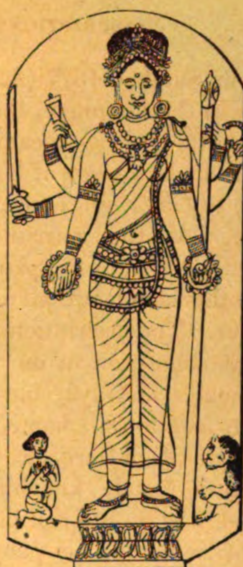
is dated in Sambat 1377 (A.D. 1210); but, owing to some ambiguity in the language, the Pandit of the survey can make nothing certain of its meaning, except that it concerns a certain Karma Deva, son of Harideva, a descendant of Kasyap, who came to Gaya hill, and there is no place now known by that name. Another inscription in a similar character seems to be equally difficult of explanation. It is dated a year earlier than the other and mentions a Datta Sen, prince of Brahmans, of Sattapur. The inscription in the Tailangga character mentions, that some person on the 3rd of Asharh performed his ceremonies at Gaya, but the person has very strangely omitted to mention his name.

On a stone beam here, are carved Brahma Narayan and Siva, with a female kneeling at each end of the row of gods. Below is an inscription, which relates to a Janardan, the son of Som, but my people can give no rational explanation of what he is said to have done, and the inscription seems to have no connection with the image. Brahma, it must be observed, according to Hindu legend has four heads; but in his images, carved as usual in relief, three only are visible, the fouth being behind. There can be no doubt, that the chief figure in the cave of Elephanta, and which was certainly the object of worship in that ancient temple, represents Brahma. Yet the imprudent zeal of some of our orthodox clergy has grasped at the three visible heads, as a proof of an universal belief in the doctrine of a Trinity; just as if no rational argument for this opinion had existed. Even, if the number of heads in the idol had not been entirely mistaken, can it be supposed, that the truth of any doctrine of Christianity requires the support of Hindu legend?*

Near it is an image, which represents one of the milder forms of the female power, with the lion of the Syrian queen or Cybele. The area of the Vishnupad is so small that no good view of the building can be had, which is the more to be regretted, as it possesses much more elegance than any Hindu

* The idea of the Hindoo Trinity has no reference to whether Brahma have three, four, or five heads as he is sometimes represented. Brahma corresponds with the Saturn of Greek Mythology; the Hindoo Trinity has reference to the three great operations of nature, *production*, *preservation* and *destruction*, or rather *change*.—[Ed.]

1



One of the milder forms of the Female Power, with the Lion of Cybele.



Ten Avatars of Vishnu (Dasahatur) near Vishnupad.

2

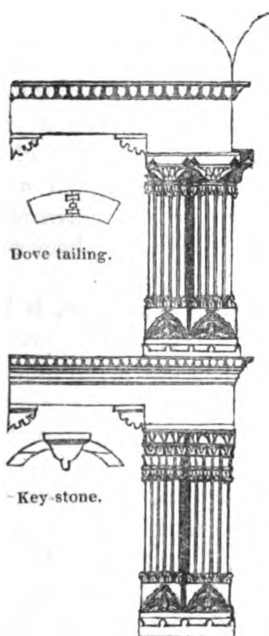


Very strange old Image in the Vishnpad.

J. Netherclift Lithog.

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structure that I have yet seen. It was lately built by Ahalya Bai, the widow of Holkar; and workmen were brought on purpose from Jaynagar, not only to build it, but to quarry the stones. The total length on the outside, as will appear from the ground plan is only 82½ feet, so that it would make a small parish church; and the stone, although well squared, and very soft, has not by any means been cut smooth; yet the building is said to have cost 3,00,000 rs. and it required 10 or 12 years labour. The mandir over the object of worship is an octagonal pyramid, probably 100 feet high, with many mouldings exceedingly clumsy, and much in the abominable style of the great gateways of the temples in the south of India, built by Krishna King of Vijayanagar, such as that of Kanchi or Conjeveram. The nat mandir or porch in front is however a very neat airy work, and consists of a square centre supporting a dome with a narrow gallery on three sides, The ground plan and elevation of one of the buttresses, which support the roof, will give some idea of the whole. My painters failed in an attempt at placing the



Elevation of one of the Buttresses in the Vishnupad at Gaya.

whole building in any thing like perspective. The outside of the dome is peculiarly graceful. Its inside is not so light but still is highly pleasing to the eye. The columns are very neat, disposed four and four in clusters; but owing to this, and to their being placed in a double order one above the other, their dimensions are insignificant, which is the greatest defect in this part of the building.

The masonry of the dome is exceedingly curious, and is of a kind that I believe is unknown in Europe; but on this subject I have at present no book to which I can refer. It was built without any centre, and instead of being arched, consists of horizontal rows of stone, each row forming a circle, and each circle being of less diameter than the one immediately below. The horizontal thickness of the stones in each row is the same throughout. Each row is defined by two concentric circles, and the ends of each stone are defined by two of the radii. The stones of each row are therefore firmly wedged together, so that no power could force them inwards, and each joining of the same row is united by three clamps of iron let into both stones. The clamp in the middle is quadrangular, and passes through the whole depth of the row. The other two reach about two inches into the upper surface of the stones; the outer clamp being in form of a dove-tail, the inner in that of a parellelogram, as will appear from the plan annexed to the elevation of the building. The key-stone is circular, with a shoulder projecting over the edge of the uppermost horizontal row. The workmen say that the dome might have been constructed twice the size on the same plan.*

Although this temple is quite new, it has lost much of its appearance from want of care. It especially is injured by an oozing of the lime, which has made numerous large irregular marks on the black stone, which the priests will never take the pains to remove. I am indeed persuaded, that they never will expend a farthing on the preservation of the building, for which they have the utmost indifference; and as it is the object of worship alone that is sacred, I doubt much whether they would have wished for the building, had not the builder, all the time it was erecting, been an excellent subject for their operations. The object of worship at Vishnupad I was

* Indian architecture well deserves examination.—[Ed.]

3



a near Vishnupad at

ad at Gaya

pad.

r among the Hindoos –

5





Metcalfe's Litho.

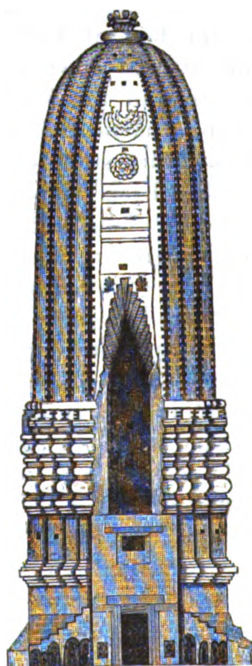
not admitted to see. No positive refusal was given to my entrance into the dark recess where it stands; but I saw that the people would be pleased at my not intruding. It is, I am told, a part of the rock, in which there is a cavity, that resembles the impression made in clay by a man's foot, but considerably larger than the human size. It is supposed to have been made by the foot of Vishnu, when he stood on Gaya, in the attempt to hold down that monstrous infidel. The east side of the area of the Vishnupad is shut up by another temple, which Ahalya Bai had commenced; and when her death put an entire stop to its progress, the first order only of columns had been completed.

[Dr. Buchanan after a very long account of the idols of Gaya and of the thousands who resort thither to perform pilgrimage, thus concludes.—Ed.]—I stood some time near Pretsila the rock of the ghost,* in silent commiseration of human imbecility, which here is conspicuous in a most disgusting form. One dirty ignorant priest led up the pilgrims one after the other to the rock, and in the most careless and hurried manner, and quite devoid of all appearance of reverence for the place or deity, told each what to do, concluding with the words, "give me a *paysa*.†" This was probably the whole sum originally demanded, but it is repeated merely as a matter of ancient form; for, although the votaries, with every appearance of devotion, did punctually whatever mummery the priest directed, no one offered the paysa, which they too well knew would have been rejected with scorn. Another fat, half-naked dirty fellow leaned carelessly with his back against the rock, and without deigning to notice them in the smallest degree, allowed the pilgrims to prostrate themselves and kiss his feet. The pilgrims were afterwards taken to another place, where their thumbs were tied together with garlands, and they were kept in this situation until they and the priest of the day came to an agreement about the amount to be paid. During the whole time I was on the hill, there was the utmost tumult; the priests and other religious medicants were bawling for money, and the votaries, who had performed their devotions, and were now roused to a consideration of the means they had for returning home, were soliciting moderation.

* So called from its being the residence of a terrific spirit, to satisfy whom, Ahalya Bai and Madannidhan built a temple on the adjacent hill. —[Ed.]

† Paysa, a copper coin.

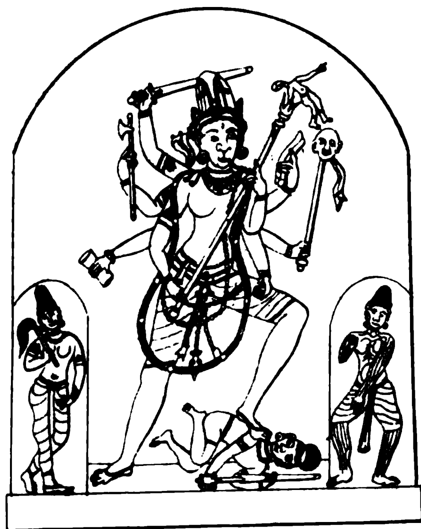
About 14 miles from Gaya is a town named Koch, where there is a considerable temple of brick in form of a quadrangular tower, of which the annexed drawing was made by Khan Bahadur, son of Raja Mitrajit. This contains a Lingga,



Temple at Koch.

which has a priest and endowment, and is an object of worship. It is attributed to the Kol Rajas, which would confirm the tradition of these chiefs having governed the country immediately previous to the Muhammedan conquest; for the building is so entire, that it cannot be supposed of much greater antiquity. But all around there are many ruins in a state of much greater decay, and I think it probable, that these are the work of the Kol, and that the temple has been erected with part of their materials. This in fact is confirmed by the tradition of the priest, who says, that he knows nothing of the Kol, and that the temple was built by a certain Raja Bhairavendra, but when, or where he lived, is totally

2



Mahadeva, or Siva. at Koch



Lakshmi - (Ceres) at Koch.

4



Hara & Parwati, at Koch.

3



Kamadeva (God of Love) at Koch.

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J. Netherclift Lithog.

unknown. It would seem, as if the temple had been surrounded by a colonnade, many pillars lying round it, and there being on all sides some traces of a building. The columns are of granite, and of a curious structure, but do not exceed four feet in length. Before the temple are lying many images, which have been collected from the neighbouring ruins. There is also a stone containing a row of deities sitting on various animals. Although some of the figures are evidently male, my people allege, that it represents eight celebrated forms of the female power; but on the spot it is called the nine planets. There is also a row of figures like the 10 Avatars, but the place of Buddha is supplied by Radha. The only inscriptions are two short ones, on the back of the stones containing images of Buddhas. The head of the one and feet of the other were broken. The inscription on the stones commencing "*Ye Dharma Hetu*" and ending "*Ebambadi Mahasramena*" is the form of dedication common on the images of this district, that undoubtedly represent Buddhas, and is considered farther as a clear proof of any image, on which it is found, having been erected by some person who worshipped these lawgivers. Some images are also scattered on the principal heaps of ruins, on part of which the town of Koch is situated, at some distance south from the present temple. At Barawang, about 10 miles westerly from Tikari, is a tank and some heaps of bricks, concerning which no tradition whatever remains. Under a tree have been collected some broken images, among which may be traced two like Gadadhar, a Nrisingha, and one which seems to me to represent a marriage, with the gods looking on as witnesses. North some way from thence is the principal ruin attributed to the Kol Rajas. It would appear to be a parallelogram of 1100 by 750 feet, enclosed with an earthen rampart strengthened by very irregular bastions, which extend across a counterscarp. The rampart and counterscarp are 100 feet thick, and from 30 to 24 feet high, and are surrounded by an enormous ditch, 350 feet wide. Many heaps containing broken bricks are placed irregularly through the area, and may have been buildings of a very considerable size, especially one enclosing an area of 70 feet square. There are no images about the ruins, which appear to be of very great antiquity, the whole buildings being reduced to

earth, with a few fragments of brick intermixed, as is usual in most of the ruins attributed to the Kol; but this is the only one that would appear to have been fortified, and was probably the stronghold of their principal chief, who resided at Buddha-Gaya. The inferior chiefs were probably prohibited from fortification. On the outside of the ditch has been a tank about 600 feet by 360, and its greatest length extending from north to south. Kauyadol is a very remarkable granetic peak on the southern boundary of this division, and adjacent to the Barabar hills, which contain many remains of antiquity.

In the town of Gaya is a pretty large temple called Krishna-Dwarika, which is not mentioned in the Gaya Mahatma, nor has it acquired any considerable celebrity; but the Gayawals have built a Baithak-Khana or place of assembly, where they discuss the news which interest themselves, such as the arrival or conduct of pilgrims, and where they play at cards, talk to parrots, or amuse themselves in any other manner equally laudable. A vast number of images are scattered about the area, or built into the walls. One is an emaciated armed male figure rendered most hideous by having three heads. This is not seated, but is dancing on a human body. Another perhaps still more terrific. Although called the Great Mother, it is an unarmed male with four legs, sixteen arms, and seven heads. In each hand it has an animal on a plate, as if dressed for food. It is dancing on four mens' bodies, two prostrated, and two ready to be crushed. The girdle and crown are ornamented with human heads, and on that, which terminates the crown, is seated a Buddha. Round this chief figure eight female armed furies are dancing on an equal number of human carcasses.

In my account of the religion of the Burmas (Asiatick Researches, vol. 6, page 269) it is mentioned, that four great lawgivers or Gods of the sect of Buddha, have appeared on this earth, according to the Italian orthography of the missionary Sangermanno, these persons are named Chauchasam, Gonagom, Gaspa and Godama, the doctrine of the latter being alone followed in that country. In Ceylon the same is the case, and the names of the four lawgivers, according to Captain Mahony's orthography (Asiatic Researches, vol. 7, p. 32), are Kakoosandee, Konagammeh, Kaserjeppe



Mahamaya (Great Mother) in Krishnadwarika Temple.



Emaciated armed Male Figure in

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and Gautama. These names are no doubt the same with those given in Ava, only differently corrupted; but the appellations given to the four lawgivers of the sect by the converted Sannyasi are very different. He calls them Mahamuni, Chandamuni, Sakyamuni and Gautamamuni, all of whom were Buddhas, that is very holy persons; but there have been many other such persons; and he says, that as Buddha is merely a title common to many, it is highly improper to speak of such a personage as Buddha having been born at such or such a time, or having performed certain actions; and in fact, while I was in Ava I very seldom heard the term Buddha used. The same would also seem to be the case in Ceylon; for, although Captain Mahony generally calls Gautama by the name of Boodha, yet that is probably in compliance with the common custom of the Hindus; and in his account there is a passage (p. 39), which would seem to condemn the practice as improper. In the Amarkosh this doctrine mentioned by the convert is also fully implied. Gautama is not mentioned among the synonyms of Buddha, which are Sarbaggna, Sugata, Buddha, Dharma Raja, Tathagata, Samantabhadra, Bhagawan, Marajit, Lokajit, Jina, Sarabhiggna, Dasabala, Adwayabadi, Binayaka, Munindra, Srighana, Sasta and Muni: but he is called a Muni, and might have been in the same manner called a Buddha, a Bhagawan or any other of the above mentioned synonyms; but, in speaking of him, such appellations should be joined to some of his various names, as Sakya Muni, Gautama, Buddha or the like. These names, by which Gautama is known, according to the Amarkosh, are Sakya Muni, Saka Singha, Sarbartha-Siddha, Sauddhodani, Gautama, Arkabandhu, and the son of Mayadevi. It must be observed, that in the explanation (Tika) annexed, this person is said to have been descended from Sakya, who by the convert is called the third lawgiver of the Buddhas, and must not be confounded with his descendant, one of whose names is indeed very similar.

Among the orthodox Hindus Buddha is not considered as synonymous with Bhagawan a deity, or Muni a saint, but is always talked of as one personage, an incarnation of Vishnu, and in an inscription found at Buddha-Gaya, of which a translation has been published in the Asiatick Researches

(vol. 1, page 284), this is fully stated. It is there mentioned by the author of the inscription that Buddha the incarnation of a part of Vishnu, and the same with Hari, appeared at the commencement of the Kaliyug in a wild and dreadful forest, and that Amar, one of the nine jewels of the court of Vikramaditya, having discovered this place of the supreme being in the forest, caused an image to be made, and a holy temple to be constructed, and therein were set up the divine foot of Vishnu, the images of the Pandus, of Brahma, and the rest of the divinities. This place, according to the inscription, is called Buddha-Gaya, and the fore-fathers of him, who shall perform the ceremony of the Sraddha at this place, shall obtain salvation, as is mentioned in the Vayu-Puran. And that it may be known by a self evident testimony, that Amara erected the house of Buddha, the author of the inscription has recorded the event on a stone, in the year of the era of Vikrama 1005 (A. D. 948). As Amara and Vikrama are usually considered contemporary, and as this circumstance is expressly stated in the inscription, it might be considered as very strange, how an inscription engraved 1005 years after the time of Amar could be considered as a testimony of that person's having erected the temple, but Mr. Bently in his valuable treatise in the Asiatick Researches (vol. 8, page 242) has shown, that Amar lived long after the commencement of the era of Vikrama, and not far from the time here assigned. It may therefore be alleged, that the inscription was made by Amar, and that this person built the temple of Mahamuni. That Amar may have built the present temple, is very probable; but that he could have composed this inscription, appears to me impossible. It mentions, that in the temple built by Amar, that person placed images of five sons of Pandu; but the small building containing these is evidently a very recent work, in which some old images of Buddhas have been placed, and now named after these heroes. Besides, if Amar built the great temple, he must have been of the sect of Buddha, and the story of a Buddha-Avatar is considered by these heretics as altogether void of truth. That Amar was not orthodox, I am told is clear, from his having omitted in the beginning of the Amarkosh to use any sign of a true believer. And that he was of the sect of the Buddhas, I am assured, is

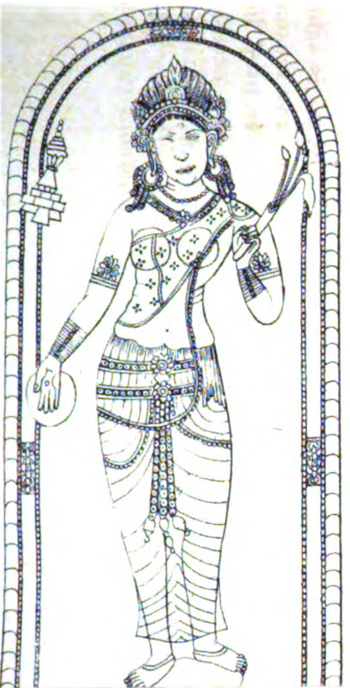
proved by the synonyms, which, as I have above mentioned, he gives for a Buddha and for Gautama; and farther these synonyms are not compatible with his having been the author of the inscription in question. I have no doubt therefore, that this inscription is modern, and was composed by some person of the sect of Vishnu, and has been erected to account for the continuance of the worship paid at this place to the Pipal tree, which in compliance with ancient superstition has been ordered in the Gaya Mahatma. I presume, that it is on some such authority as this, that certain theorists have imagined the followers of the Buddhas to be a branch of the sect of Vishnu. The inscription in question has probably been removed by the person, who transmitted a copy to the Asiatick Researches, as I met with none such.

The sect of Buddha, as well as the orthodox Hindus, believe that this earth is now in the fourth age of its existence, and that another age will come. Each age has had a lawgiver, and Gautama's authority, according to the Burmas and Ceylonese, is now established. They therefore commence the Kaliyug, or fourth age, with his appearance, and the different systems on that subject have occasioned various periods to be assigned for that event. It was agreed by both of the parties that came from Ava that Gautama resided at Buddha Gaya, and that at his desire a temple was built by Dharma Asoka, King of Padripuk, who held his court at the place. The visitant who came last, according to the Mahanta, placed this event, or the commencement of the Kaliyug, about 2100 years before the year 1211, while the convert gave 5000 years for the era. This latter date was evidently in conformity with the opinions prevailing now in India, the convert being unwilling to cede in antiquity to the pretensions of the Brahmans. The computations of Ceylon and Siam place Gautama in the sixth century before the birth of Christ, which I take to be his real era; for the Mahanta said that he could not speak with precision concerning the date which his visitors from Ava gave, as he had omitted to take it in writing. It is said by the convert that the temple is not dedicated to Gautama, but to Mahamuni, or the earliest lawgiver of the present earth; and he said that the messengers who visited it

from Ava merely venerated the place on account of its having been the residence of Gautama, considering the influence of Mahamuni to be extinct. That a temple may have been built here in the time of Gautama, and that it may have been dedicated to Mahamuni, and that perhaps some of its remains may be found among the ruins, is highly probable; but, that the present mandir is so ancient, is more than doubtful. I think it, however, probable that from that time the temple did not go entirely to ruin until the overthrow of the Pal Rajas, and was repaired, or perhaps in a great measure rebuilt from time to time, as it went to decay, as being the chief seat of the religion which seems for many ages to have predominated in this country, on which account it was called Mahabuddha by the messengers from Ava. The tradition already mentioned of a temple having been built by Amarsingha, in the 10th century of the Christian era, seems to me exceedingly probable, if referred to the great mandir, which is now in the last stages of decay compatible with anything like a preservation of original form.

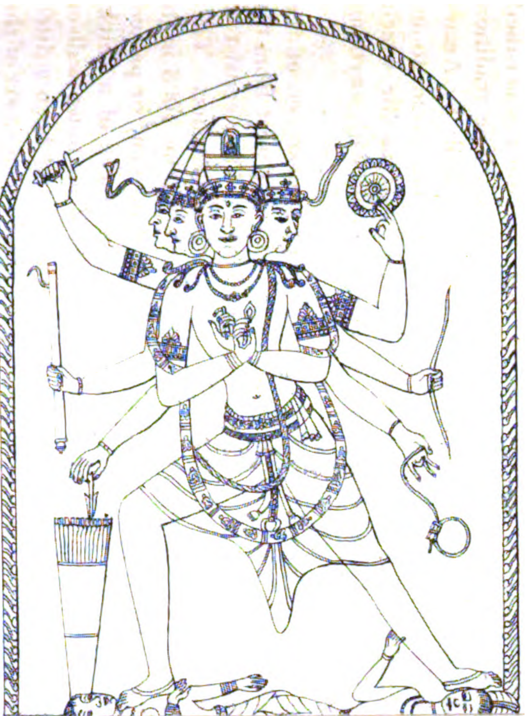
I now proceed to mention the present appearance of the ruins, which are situated a few hundred yards west from the Nilagan river, on a plain of great extent. They consist of two parts, situated north and south from each other. That to the north is the largest, being 1482 feet by 1006 in its greatest dimensions, and is called the Rajasthan, or palace. On the east, north, and west faces are traces of a ditch, and on the west and south are traces of an outer wall or rampart, with the appearance of there having been a ditch between it and the palace; but by far the greater part of the building seems to have been a large castle or palace, which probably contained many small courts, although these have been entirely obliterated by the operation of time. Except where there are traces of a double wall and ditch, the whole is now an uniform terrace, consisting chiefly, as is said, of bricks, but covered with soil. Nor is there any reason to suppose that the kings of Magadha have ever lived here, since the time of Dharma Asoka, or his immediate successors. On this ruin has lately, but at different periods, been erected a building containing two temples, with an adjoining habitation. One of the temples contains the hideous gagannath,

1





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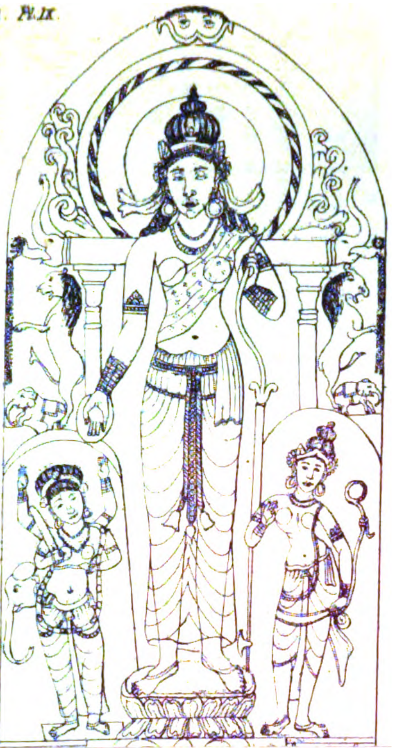




Image called Gayatri, before the great Mandir at Bodhgaya.



Image on the south-east side of the Sannyasis house at Bodhgaya



Image called Parbati, or Chhota thakurani, at Bodhgaya.

4



Image on the door of the Sannyasis at Bodhgaya.

5



Image in the Sannyasis House at Bodhgaya.

6



Image in the Sannyasis House at Bodhgaya.

7

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Image at the east gate of the Sannyasis at Bodhgaya



Image on the east gate of the Sannyasis, at Bodhgaya



Image on the south of the Sannyasis at Bodhgaya.

London 1838. W. H. Allen & Co. 7, Leadenhall St.

J. Netherclift Lithog.

and was built by the father of the present occupant. The other is a temple of Ram, built by a Gangga Bai, who died a year or two ago.

Immediately south from the palace, and separated from it by a road, was the temple, which has left a ruin about 800 feet from east to west, and about 480 from north to south. This also seems to have consisted of various courts, now mostly reduced to irregular heaps of brick and stone, for immense quantities of materials have been removed. The largest heap now remaining is at the north-east corner, where there is a very large terrace, on which are two modern small temples. The one farthest east is called Vagiswari, and was erected by one of the Mahantas of the great convent of Sannyasis. An image was dug from the ruins, and in its new name no attention has been paid even to sex, as it represents an armed male, while Vagiswari is the goddess of eloquence. The history of the other temple, called that of Taradevi, is similar. The image which has been selected in place of having the form of Tara, one of the most hideous of the female destructive power, represents a mild-looking prince standing on a throne supported by seven Buddhas. In the east end of this terrace, in order to procure materials for building, is now forming a great excavation. The workmen have laid open a chamber of brick, a cube of about 20 feet, without door, window, or stair, which could only have been intended for a tomb. Although the followers of Gautama in Ava burn the dead, yet the bones and ashes are always, I believe, buried; and I know that those of the priests, at least, are preserved in monuments, and the custom seems to have prevailed among the Buddhists of India, for the late Mr. Duncan informs us (Asiatic Researches, vol. v., page 131,) that, in digging into extensive ruins about four miles north from Banaras, an inscription was found along with some bones in an urn, and an image of a Buddha; and Mr. Duncan rationally conjectured that these bones belong to some votary of Buddha, which is confirmed by the inscription. It terminates with the sentence usual as a form of dedication on the images of this district, and mentions that Sthira Pal and his elder brother, Basanta Pal, King of Gaur, in the year 1083 of Sambat (A. D. 1062), came to Kasi, performed worship, enriched the city, and ordered all those who did not

follow the Buddhas to embrace that sect. The chamber, therefore, now opened in the ruins of Mahabuddha was in all probability a tomb. South from this terrace, and separated from it by a road, which is said to have been covered by an arch, and to have extended all the way to the river, has been a large range of buildings, but the greater part of the materials has been removed, and there only remain some heaps of broken bricks, and images, one of which is very large and curious. It seems to me to represent a prince who has lost his wife, and she is represented lying above his head, and attended by two mourners. The inscription contains merely the usual form of dedication. It is possible that this may have been the royal sepulchre, or at least the place where the monuments of the princes were placed. South from thence has been a small tank. The arched road above-mentioned led between the two masses now described into the area of the great mandir, or shrine, the only part of the building that remains at all entire. On the right as you enter the area is a small chamber of brick, which contains no image, and has every appearance of being modern, which is also the case with two small chambers on the left; but one of them is evidently alluded to in the inscription given in the first volume of the Asiatic Researches lately quoted. This, which is nearest the entrance, contains several large images, said to have been collected from various parts of the ruins, and built into the wall, five of them representing an equal number of Buddhas, sitting in the usual manner, are commonly said to represent the five supposed sons of Pandu. One of them seems clearly to me a funereal monument: the dead body is laid over the head of the Muni, or Buddha, through whose favour he may be supposed to have reached the upper regions, and is accompanied by two mourners. The inscription is not thoroughly understood by my people, and some of the letters are defaced. It commences with the form of dedication usual among the Buddhas; but all that follows is interpreted in quite different manners by three Pandits whom I consulted.

The other small chamber is the tomb (Samadhi) of the first Mahanta of the convent of Sannyasis. Between these buildings and the porch of the great shrine is lying a stone, containing the impression of a Buddha's feet, and by the convent

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Vageswari. at Bodhgaya.

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Chamber before the great Mandir at Bodhgaya.

London. 1838. W. H. Allen & Co. 7, Leadenhall St.

J. Netherclift Lithog.

called Buddhapad; but there can be little doubt that this is the Vishnupad alluded to in the first volume of the Asiatic Researches. It has evidently been taken from the ruins, several similar having been carried from thence to the convent, and round it many images have been heaped. By this mark of the deity's presence is lying a stone, which contains an inscription of considerable length. Several of the images collected here have inscriptions. The most remarkable is one called Sabitri (a goddess), but which seems to be a male votary of the Buddhas, having a Muni seated on his crown, for he resembles a prince. The inscriptions mention no person's name, but invoke the Buddhas. On a male figure at the same place, now called Saraswati (a goddess), is the usual pious sentence of the Buddhists.

The great shrine, or mandir, is a slender quadrangular pyramid of great height, much resembling that at Koch, but its summit is broken, and a part hangs over in a very singular manner. This spire is, on three sides, surrounded by a terrace about 25 or 30 feet high, the extreme dimensions of which are 78 feet wide by 98 long, and one end of this terrace towards the east has covered the porch; but that has fallen, and brought down the part of the terrace by which it was covered. A stair from each side of the porch led up to the terrace, on which there was a fine walk round the temple leading to the second story of the shrine in front, and to a large area behind, on which is planted a celebrated pipal tree (ficus religiosa). As this is still an object of worship, and frequented by the pilgrims from Gaya, as I have already mentioned, the north side of the terrace has been repaired as a road, and some zealous person has lately built a stair on the outside, so that the orthodox may pass up without entering the porch, and thus seeing the hateful image of Buddha. The mandir has been covered with plaster, some remains of which show that it has been subdivided into numberless projecting corners, petty mouldings, and niches, each containing the image of a Buddha in plaster, and on each projecting corner has been placed a stone, somewhat like a bee-hive, having a Buddha carved on each of its four faces, with a hole in the top for incense. The number of such now scattered over the country is almost inconceivable. The porch has always been small, and since it fell some persons have cleared

away the ruins, and constructed a gate of the fragments. The shrine or cavity in the mandir that is on a level with the ground, and the entrance to which was through the porch, is small and covered with a Gothic arch, the plaster work on which has been divided into small compartments, each containing an image of a Buddha. The whole far end of the chamber has been occupied by a throne of stone (singhasan) in a very bad taste, and which has been disfigured by a motley row of images taken from the ruins, and built on its front so as to hide part of the deity. This is a monstrous mis-shapen daub of clay, and has been well enough represented in a drawing published, if I recollect, by the late Colonel Symes. The extreme rudeness of this image may be perhaps considered as a proof of great antiquity, and this may have been the original image placed here in the time of Gautama, round which the temple has been constructed. There is, however, current a tradition of the original image having been gold, and of its having been removed by the Muhammedans, so that the present image is supposed to have been made after the sect had undergone persecution, and could no longer procure workmen capable of making a decent substitute. Above this chamber are two others, one on the level of the old terrace, and the other still higher; but with these the falling of the porch has cut off all communication. Several of the people, however, in the vicinity remember the porch standing, and have frequently been in the chambers, a stair from the terrace leading to the uppermost. This was quite empty, and was probably the place where treasure was deposited. The middle chamber has a throne, but the image has been removed, and, if there was ever an image of gold, this was probably its place.

The terrace enlarges behind the temple, towards the west, and forms an area, on which is growing the Pipal tree, which the orthodox suppose to have been planted by Brahma. The worshippers of Gautama on the contrary assert, that it is placed exactly in the centre of this earth, and call it Bodhidruma. They say that it was planted by Dugdha Kamini King of Singhaldwip 2225 years before the year of our Lord, 1811, that is according to them 125 years before the building of the temple. The tree is in full vigour, and cannot in all probability exceed 100 years in age; but a similar one may

have existed in the same place, when the temple was entire. Around its root has been lately raised a circular elevation of brick and mortar in various concentric stages, and on one of these has been placed a confused multitude of images, and carved fragments of stone, taken from the ruins. On the pedestal of one of these images, representing a man with a woman sitting on his knee, which is one of the most usual figures in the district, the messengers from Ava carved an account of their visit, and which must render us cautious in admitting the inscriptions, on the various images on this district, to have any connection with their erection.

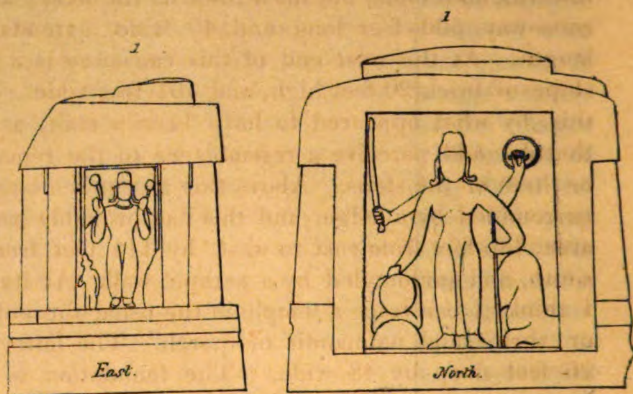
The number of images at Buddha-Gaya is very great, and there is scarcely any one form of those, that are scattered so numerously about the whole country for eight or ten coss in all directions, but what may be found in its immediate vicinity, nor is there any reason to doubt, that the whole in its immediate vicinity belonged to the great temple. This also seems to me to have been the quarry, as it were, from which almost the whole of these for eight or ten coss round have been carried. Many, which are now worshipped by the orthodox, and no doubt have a strong resemblance and many attributes of the gods of the present Hindus, seem to me to have had the same origin. It is evident indeed, that the people are totally careless in this respect, worshipping males by the name of females, and female images for male deities. Nay some of the images which they worship, are actually Buddhas in the most unequivocal forms, while others, on or over their heads, contain representations of these lawgivers, as testifying their superiority. Another mark by which most of these images may be known to have belonged to the Buddhas, is the enormous size and distention of the lobe of their ears, which is very general in the images of this district, and even prevails in many of such as have in other respects the most decided appearance of the idols now worshipped. Another mark still, by which the convert asserts, that all images formed by his sect may be distinguished, is a mark on the palm of the hands and soles of the feet, which is supposed to resemble the lotus flower.

The Division of Nawada is a very beautiful country, finely adorned, both towards the north and south by hills; and even in the great plain that intervenes, many rocks project,

and give an interest and variety to the view. The hills to the north are bare, but those towards the frontier of Ramgar are finely wooded, and the vallies there are watered with clear perennial streams; but the country in that quarter is grossly neglected, and almost in a state of savage nature. The plain country is in general well planted, and the villages stand high. There are 10 houses of brick, 50 houses of two stories with mud walls and covered with tiles, 500 of the same nature but thatched, 500 houses of one story with mud walls and covered with tiles. Thirteen-sixteenths of the whole are huts with mud walls, and thatched, eight parts with reeds, and five parts with straw. Two-sixteenths have walls of hurdles. The remainder are *markis*, (like bee hives). The Moslems have about 50 mosques built of brick, and many monuments of saints, but none of them are at all remarkable either as buildings, or for their sanctity. The chief place of worship among the Hindus is on the Pangchane river, where it passes between the hill called Giribraja and the former abode of Jarashandha. About 5000 people are said to bathe there on the Purnama of Kartik.

West from Giriyak, on the south side of the above-mentioned ridge near its centre are five springs, four of them hot, and dedicated to worship. At these springs, on the Tiluga-Sangkranti, from 8 to 10,000 people assemble to bathe, and the Rajagriha Brahmans have the small profits that accrue. These springs are situated in a row parallel to the hill, and are collectively called Tapoban.

I now proceed to describe the ruins on Giribraja or Giriyak hill. The original ascent to this is from the north-east, and from the bottom to the summit may be traced the remains of a road about 12 feet wide, which has been paved with large masses of stone cut from the hill, and winds in various directions to procure an ascent of moderate declivity. When entire a palanquin might have perhaps been taken up and down; but the road would have been dangerous for horses, and impracticable for carriages. In many places it has now been entirely swept away. I followed its windings along the north side of the hill, until I reached the ridge opposite to a small tank excavated on two sides from the rock, and built on the other two with the fragments that have been cut. The ridge here is very narrow,



— of a Stone-like Altar at Kenyadol.



A Ganesa from Giriyak.

J. Netherclift Lithog.

extends east and west, and rises gently from the tank towards both ends, but most towards the west; and a paved causeway 500 feet long and 40 wide, extends its whole length. At the west end of this causeway is a very steep slope of brick 20 feet high, and 107 feet wide. I ascended this by what appeared to have been a stair, as I thought that I could perceive a resemblance to the remains of two or three of the steps. Above this ascent is a large platform surrounded by a ledge, and this has probably been an open area, 186 feet from east to west, by 114 feet from north to south, and surrounded by a parapet wall. At its west end, I think, I can trace a temple in the usual form of a mandir or shrine and natmandir or porch. The latter has been 26 feet deep by 48 wide. The foundation of the north east corner is still entire, and consists of bricks about 18 inches long, 9 wide, and 2 thick, and cut smooth by the chisel, so that the masonry has been neat. The bricks are laid in clay mortar. Eight of the pillars that supported the roof of this porch, project from among the ruins. They are of granite, which must have been brought from a distance. They are nearly of the same rude order with those in the temple of Buddha Sen at Kaiyadol, and nearly of the same size, having been about 10 feet long, but their shafts are in fact hexagons, the two angles only, on one side of the quadrangle, having been truncated. The more ornamented side has probably been placed towards the centre of the building, while the plain side has faced the wall. The mandir has probably been solid like those of the Buddhas, no sort of cavity being perceptible; and it seems to have been a cone placed on a quadrangular base 45 feet square, and as high as the natmandir. The cone is very much reduced, and even the base has decayed into a mere heap of bricks. On its south side in the area by which it is surrounded, has been a small quadrangular building the roof of which has been supported by pillars of granite, three of which remain. Beyond the mandir to the west is a semi-circular terrace which appears to have been artificially sloped away, very steep toward the sides, and to have been about 51 feet in diameter. The cutting down the sides of this terrace seems to have left a small plain at its bottom, and an excavation has been made in this, in order probably to procure materials.

Returning now to the small tank and proceeding east along

the causeway, it brings us to a semi-circular platform about 30 feet in radius, on which is another conical building quite ruined. East from thence, and adjacent, is an area 45 feet square, the centre of which is occupied by a low square pedestal 25 feet square, divided on the sides by compartments like the pannelling on wainscot, and terminating in a neat cornice. On this pedestal rises a solid column of brick 68 feet in circumference. About 30 feet up this column has been surrounded by various mouldings, not ungraceful, which have occupied about 15 feet, beyond which what remains of the column, perhaps 10 feet, is quite plain. A deep cavity has been made into the column, probably in search of treasure, and this shows, that the building is solid. It has been built of bricks cemented by clay, and the outside has been smoothed with a chisel, and not plastered. Part of the original smooth surface remains entire, especially on the east side. The weather on the west side has produced much injury. To the east of the area, in which this pillar stands, is a kind of small level called the flower garden of Jarasandha; an idea perfectly ridiculous, the extent being miserable, and the whole a barren, arid rock. It must be observed, that on the west extremity of the hill, towards the plain where Jarasandha is said to have been killed, and from whence there is an opening to what is most peculiarly called Rajagriha, there is a road ascending the hill exactly similar to that at the east end, and I have no doubt, that it reaches this temple, and could have served no other purpose, but as opening a communication with it, although by the natives it is considered as the remains of a fortification. In this I have no doubt, that they are entirely mistaken. The only image that I saw near the temple, was a small one exceedingly decayed, which was found in the bottom of the tank. It represents a four-armed female with a child on her knee. The natives acknowledge, that it cannot represent Ganes Janani, or Ganes, and his mother, because the female has four arms and holds weapons in her hands. It probably represents the warlike Semiramis with her son Niniyas. It has the strongest affinity with an image placed near Patandevi at Patna and with one found at Koch but the weapons held in the hands are different, and the supporting animal is totally effaced. It has the ears of the Buddhas.

In the vicinity the column of brick is called the seat (Bai-

thaki and Chabutara) of Jarasandha, and the temple is said to have been his house; both opinions are totally untenable. At Nawada the whole ruin was said to be the seat (*chautara*) and flower garden of the same personage; but the ascent must always have been too laborious to render it a place of luxurious retiremeut, and it can only be supposed to have been attended from religious motives, most nations considering that the deity is to be pleased by whatever is painful or disagreeable in the performance. If Giriyak was the country seat of Jarasandha, and the fort of Rajagriha his capital, as is possible, this may have been his principal place of worship, with a road leading up each end of the hill from each residence of the prince. What the intention of the great pillar has been, is not so obvious. It may have been merely intended as an ornament for the temple; or it may have been erected in commemoration of Jarasandha's victories, as is said to have been customary with Indian princes; or finally, it may be his funeral monument, as his family for many generations continued to govern the adjacent countries, and were most powerful princes. The idea of Jarasandha's house having been seated on the hill Giribraja, so generally believed in the country, seems to derive its origin from a verse in the Bhagwat, which mentions, that Krishna Bhim and Arjun disguised as mendicants went to Giribraja, where was the son of Brihadratha (Jarasandha), and at the time when mendicants were usually admitted, they went into the palace, and saw the king. This is usually supposed to imply, that the place was on the hill Giribraja; but that seems straining the sense too far, as *giri* in the composition of the word cannot signify a hill, the other part *braja* signifying many; but Giribraja is not a cluster of hills, on the contrary it is one hill of a cluster. Giribraja seems therefore a proper name, like the vulgar word Giriyak, for which no meaning can be assigned, and like Giriyak was probably applicable to both the hill and adjacent village. The situation of these ruins, which has in a great measure saved them from the depredations of those in search of materials; and their dry and parched vicinity, which almost entirely checks the growth of the destructive fig trees, may account for their preservation through so many ages.

THE SHEYKPURAH DIVISION is bounded on the south by a mountainous chain extending east from Gidhaur, part of which

it includes; it consists of two portions. One is a fine plain, through which are scattered many detached naked rocks. This is tolerably cultivated, but in general indifferently planted, and often with palms alone. Some part of this is much neglected, looks very dismal, and is covered with long grass, which in the dry season is quite brown. The other portion, in the north corner, is flooded by the swelling of the Ganges, which flows up numerous channels, and covers the greater part of that vicinity. The villages alone, at that season, emerge from the flood, so that the country is bare of trees; but in the dry season its rich crops produce a fine verdure intermixed with flowers, that give it a very pleasing aspect. The officer of police alleged, that in his whole division there were only two dwelling houses of brick; but I saw more. Twenty-five houses, he says, are built of mud, and covered with tiles, but have only one story. One-sixteenth of the whole are mud houses of two stories, and covered with thatch; twenty-nine thirty-two parts are mud walled huts, of which three-quarters are covered with reeds, and one-quarter with straw; one thirty-second part consists of hovels with walls made of hurdles, partly in the form of bee-hives (*marki*) partly like pig-styes (*khopra*).*

Sheykhpurah contains 1000 houses, in a long row, by the foot of a rock. The street in some parts is so narrow that an elephant cannot pass. There are besides the following places, that may be called towns; Baragbigha contains 1000 houses, Sekundura 400, Merzagunj 400, Budhauri 200, Choyara 200, Nubinagar 200, Bishazari 100, Katrisaray 100, Kazifutehchuk 100, and Lahoyar 100. The Moslem places of worship are of very little consequence, although Sheykhpurah is said to derive its origin and name from the tomb of a saint named Sayeb, who was a Sheykh.

The only place now at all frequented as holy is the tomb of a certain Saiud Jusuf, which had long remained unnoticed in a wood, when the saint manifested himself in the following manner. A poor weaver was seized with blindness, and being unable to procure a subsistence, determined to put himself to death rather than to suffer the agonies of poverty. With this intention he entered the wood, when the saint called to

* The facts demonstrate the condition of the people.—*Ed.*

him, and told him, that he would next day recover his sight. At the same time the saint enjoined the weaver to search for his tomb, and proclaim its virtues. The weaver, on recovering his sight, did not fail to obey his benefactor's orders; and he and his descendants have ever since lived at ease by the contributions of the faithful, although the tomb is a mere heap of clay, and has no endowment.* From 50 to 200 people, Moslems and Hindus, assemble at the tomb every Thursday. It is situated at Choyen, four coss south from Sheykhpurah. The only place of Hindu worship at all remarkable is at Premaya, north from Sheykhpurah five coss. A certain chief of a village, of the Dhanuk tribe, named Vasu, was killed about 500 years ago by the Muhammedans, and his ghost has ever since been troublesome. It is worshipped in a temple of brick, and a Dhanuk acts as Piyari. Every Sunday some people make offerings, and on a certain day in Vaisakh about 1000 assemble to a fair. The higher ranks pray to Vishnu on the occasions, when the Gramdevatas were formerly addressed. Each low tribe has deities of its own, to which on such occasions its members pray. There are no remains of antiquity of considerable magnitude, but numerous old strongholds of the turbulent chiefs, who until lately held the country. The most ancient probably is a mud fort, about eight miles north from Sheykhpurah, at a village named Kewara, where a Rajwar chief is said to have resided.

Duryapur Division, besides a small island in the Ganges, consists of three parts. By far the greatest portion is inundated during the rainy season, a few high places only then emerging. These high places are occupied by villages and plantations; but on the whole this part of the country is rather bare. When visited in October, just after the subsiding of the floods, it looked very ill, being a stiff black mud without any sign of vegetation. In January it was covered with almost uninterrupted crops of wheat, barley, pease, and mustard. The western part, immediately adjacent to the Ganges, forms the second part of the division, is rather high, and of a very fine soil inclining to clay, but somewhat free. It is finely planted, produces a perpetual succession of crops, especially Janera and cotton, and is astonishingly populous;

* Such credulity would seem impossible.—*Ed.*

but the villages are very slovenly. At the south-east corner of the district is the third portion surrounding two small rocky hills, and much neglected. A great part of it is overrun with stunted woods intermixed with palm trees. All the bank of the Ganges is here called Tariyani.

Division of Bar.—The immediate bank of the Ganges here is called Tariyani, and consists of two parts. 1st. Some low inundated bare land, near the river, and called Diyara. And 2dly. a high and more extensive tract, called Bhitha, extremely populous, highly cultivated, and finely planted. It is not productive of rice; but various other crops succeed one another throughout the year. During the floods the interior country is mostly inundated; but many high places afford situations for villages and plantations; nor is the inundation so deep as in Duriyapur, so that a great part has been surrounded by small banks, and is cultivated with rice. There are 22 dwelling houses of brick mostly in Bar; two tiled houses; and 700 clay walled houses of two stories and thatched. Almost every other abode has mud walls, and is thatched. Perhaps 200 may have walls made of reeds. Bar is a poor scattered place, but of great extent, and, including Masumgunj, is said by the Kazi to contain no less than 5000 houses, although others allege, that it contains only 4000. Several very respectable Muhammedan families reside in it, and it has a considerable trade. Besides Bar, this division contains the following small towns: Saksohara, Bara, Sadukpur, and Punarak, having from 500 to 300 houses each; and Bukhtyarpur, Chaundi, Rawaich, Yamunichak, and Chauragunj or Dihirimahal, having from 200 to 100 houses. In this division, except 10 or 12 mud forts built by former Zemindars, and now totally ruined, I heard of no remain of antiquity.

Behar Division—contains about 500 brick houses, of which 200 have two stories, and 300 have one story. There are about 2000 houses with tiled roofs and mud-walls of two stories; and 3000 of one story. Many of both are white washed, 2500 thatched houses of two stories, and mud-wall. All the huts have clay-walls, and are mostly thatched with straw; perhaps one in 50 or 60 may be a hovel like a bee-hive. Behar is a very large scattered place surrounding the ditch of an ancient city, now in a great measure deserted. It is divided into 24 Mahullahs or wards, but these are now

separated by fields and gardens, so that it has little appearance of a town. The most compact part is a long narrow bazar, or street, extending south from the old fort towards the monument of Shurfuddin. This street is paved with brick and stones, which, although very rough, must be of great use in rainy weather; but in every other respect it is the most wretched street, that I have ever beheld. Back however from this street, on both sides, are some respectable looking houses, surrounded by brick walls, but intermixed with hovels. There are some Mosques,* that have been tolerable buildings, but they are now quite ruinous. It is said, that, until the decline of the Mogul government, the town surrounded the old ditch on every side for at least a mile, and was as compact as Indian cities usually are; but it was reduced to its present condition, first by the Mahrattas, who sacked it in the time of Alaverdi Khan, and secondly by the great famine in the commencement of the English Government, since which it has never recovered, there being no inducement to bring people to a place, no longer the seat of any considerable establishment. It still contains about 5000 houses, among which are most of those that are of brick, or that are tiled.

Besides Behar there are in this division the following towns: Nur-Saray, including Yar-Saray, Dayanagar and Amarnagar, all contiguous, contains 750 houses; Maghra, with a Company's cloth factory dependent on Patna, contains 400 houses; Silao 600; Shah-Saray 500; Merza-Nagar 300; Asanagar 200; Bhadai 175; and Rajagriha 150. At the southern extremity of this division it includes part of the Rajagriha hills, and at Behar an exceeding rugged rock projects from the plain, but all the remaining country is level, and the southern part is inundated. This entirely resembles the adjacent parts of Bar just now described. The southern and more elevated parts are highly cultivated, and finely planted. East from Behar some part is indeed overwhelmed, with trees; but in other parts the country is too well cultivated to admit of this waste. The imme-

* The tomb of Shurfuddin, called the *Mahulla Durga,* is the chief Moslem place of worship; 50,000 votaries attend the processions of the Kurbula.—[Ed.]

diate vicinity of Behar is remarkably beautiful. Being supplied with numerous canals, a large extent is continually irrigated with machinery, and under a constant succession of luxuriant crops, while the rugged hill, brick buildings, and ruins give a pleasing variety to the scenery.

By far the most celebrated place of Hindu worship in this division is Rajagriha or the King's house; and for many ages it has no doubt been one of the principal seats of superstition in the country, and in all probability has been long the seat of empire. The small town still named Rajagriha clearly in my opinion marks out the original seat of empire, as is implied by its name, and is situated on the north side of the ridge of mountains, to which it has communicated its name, towards its east end, about seven or eight miles north-west from Giriyak, which I have described as a palace of Jarasandha, who is by all acknowledged to have been king of India, and several monuments attributed to him are shown near Rajagriha; but, although the town stands on the massy rampart of an old fortress, the natives to my great surprise have no tradition of this having belonged to Jarasandha, on the contrary they in general attribute the fortifications to Sher Shah. An inspection of the place soon satisfied me with respect to this tradition. I at first sight discovered, that there had been two fortifications. One much the larger is of an irregular pentagonal form, and is apparently very ancient, as the traces, which remain, are a mere rampart of earth, wanting outworks, but strengthened by a ditch. The ditch seems to have been about 100 feet wide, and the whole earth taken from it has been thrown up to form the rampart, which includes a space of about 12,000 yards in diameter. The present town stands upon the north-west corner of this fortress, and in that part has produced many irregularities, and the whole work seems to have escaped the notice of the present inhabitants, whose attention is solely occupied by a more modern work, which they attribute to Sher Shah, king of India in the 16th century of the Christian era. This occupies the south-west corner of the ancient fortress for a space of about 600 yards. The west and south faces are the same with those of the original rampart, but have been much strengthened. Their surface is every where covered with bricks, which have perhaps proceeded from a parapet of that material; but except these fragments no traces of such

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Varaha at Suryakunda.

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The Surya at Kasi Tirtha Rajagriha

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Image in Markanda Tirtha, at Rajagriha

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Image in Markanda Tirtha. Rajagriha

ाममग॰१२१५श्रीजिनस दि११सामवारद्दवदनामडेहा

Inscription at the feet claimed by the Brahmans near Suryakunda at Rajagriha & called by them Dattatreya (one of the 24 Minor Avatars of Vishnu) The date is Sambat 1215 (A.D. 1158) & the character Bhalemande which shews that the feet belong to the sect of Jain — this character being used, while Ganes is in the inscriptions of the Orthodox

a work remain. These however are quite superficial, and the mass of the rampart above 60 feet wide and 30 high, consists entirely of earth. Where gaps have been made in the original rampart, the spaces have been filled up with walls of rude stones brought from the adjacent hills, which have been about 16 feet wide, but have almost entirely fallen, so that nothing but the foundations remain. All along the old earthen rampart there has been a platform of these stones some feet high, which probably served for the foundation of the brick parapet, and this has been strengthened at short distances by semicircular projections, built entirely of stone. The eastern and northern faces have had no ditch, and the former has consisted entirely of stone, and has been about 18 feet thick, with circular projections at short distances. The eastern half of the northern face has been built in the same manner; but its western end has been entirely constructed of brick. The whole works of this smaller fortress, especially those constructed of immense rude masses of stone, to remove which there is no temptation, are much more decayed, than one would have expected from so short a period, as has elapsed since the time of Sher Shah; nor is there to be discovered the smallest trace of the massy buildings, which surround the gates of Hindustani cities. I am therefore inclined altogether to reject the tradition, which states this work to have been erected by Sher Shah; although, during the long period of a tumultuous life, he may perhaps at one time have strengthened his camp by the ancient ramparts. The lesser fort, appears to me to be of a much more recent date than the larger, and cannot be considered as its citadel. For besides the want of a ditch towards the town, and the gaps in the old rampart filled up by the kind of materials that are used in the new, it may be observed, that at the north-west and south-east corners a deep and wide ditch has been dug through the old rampart to cut off the communication, and to prevent an enemy from passing along the old rampart to the new works; nothing has been done to prevent an enemy from passing through these gaps into the area of the larger fort, which therefore it was no longer necessary to defend when the smaller was constructed.

The areas of both forts contain many irregular heaps, having much the appearance of the debris of buildings, but

rising to no great height, either from the lapse of many ages, from the removal of materials, or from their original elevation having been small. In some parts it would appear that there have been tanks, which are surrounded by these eminences, and these are the only ruins that retain any trace of symmetry. The heaps consist chiefly of earth, but contain many small stones and a few broken bricks. By far the largest is in the outer fort; and if it has been one building, as on the whole I think probable, it has been very large. Two conical mounds on its west side can scarcely have been natural eminences.

A short distance west from this old fortification is a high mound of earth and bricks of a circular form, and containing a small cavity in the centre, occasioned probably by the falling in of the roof. This heap is called Gyangnananda, and is said to have been the abode of a Sannyasi of that name, whose house has formed the ruin; but from the shape and dimensions of the mound this is not a tenable opinion, although it is very likely that such a person may have built a house on the mound, to which he may have communicated his name. The mound seems to me evidently to have been a temple. Rajagriha stands high, but commencing about a mile east from it, and extending for about four miles in that direction, the country is very low. Through this has been constructed a very grand mound, almost universally attributed to the Asur Jarasandha, on which account it is called Asuren. It runs in a perfectly straight line directed towards the centre of the old city, and is about 150 feet wide, rising from the sides to the middle with a very gentle slope, and may be about 12 feet perpendicular height above the level of the plain. The people imagine that it was a reservoir intended to collect the rain water and convey it to Rajagriha, from whence it was to be raised by machinery to water the flower garden on the summit of Giriyak hill, an opinion that requires no confutation. That it served as a reservoir for collecting water for the cultivation of the plain below, I have no doubt, as it does so to this day. During the whole rainy season the space between the hills and this mound forms a lake, but as the dry season advances, and as the water is let out to irrigate the fields below, the bottom of the lake is cultivated. The chief object of the work, however, I have no doubt, was as an ap-

proach to the royal city, and as such it is suitable to the magnificence of any monarch. Originally it was perhaps higher, and not so wide. The water collected in the lake has in several places broken down the mound, so that as a road it has become perfectly useless, for the small banks that have been constructed to fill up the gaps, although quite sufficient to retain the water, admit of no more bulky conveyance than a loaded ox.

The Rajagriha Brahmans, now amounting to 100 families, in many respects resemble the Dhamins of Gaya, being clamorous, ignorant, dirty beggars. Their poverty prevents them from employing persons to read the ceremonies, and being totally ignorant of Sangskrita, they repeat the forms of prayer by rote. Every 31st lunation they obtain a considerable supply; but during the long interval they make very little profit, so that almost a half of them have been reduced to the necessity of attending the Jains, who come to the place every year in great numbers, and of procuring a subsistence by taking the offerings which the Jains make at their temples.

I now proceed to mention the antiquities of the city of Behar, which has communicated its name not only to the district which I am now describing, but to the whole of a Mogul province. Although from respect to long and extensive use I write the name Behar, yet I am assured that this is a Muhammedan corruption, which is neither Persian nor Hindi, and that the word should be written Vihar, signifying pleasant, a name to which, from its natural beauty, fertility and salubrity, the place is well entitled. By a learned Jain priest, who resides in the city, I am informed that Vihar has always been the vulgar name of the place; but that a certain Padmodaya Raja, who lived about 28 centuries ago (from 900 to 1000 years before Christ), and was a Jain, took up his abode in this place, and gave it the Sangskrita name of Bisalapuri. Padmodaya was a petty prince, which, as is usual among the Jains, is denoted by saying that he governed a country 48 cos round, and he was succeeded in regular lineal descent by Suyadhan, Duryodhan and Ugriwa, after which there were no Jain princes at the place, nor does any thing remain that is attributed to these personages. The large fortress now remaining is universally called that of Maga Raja, or of

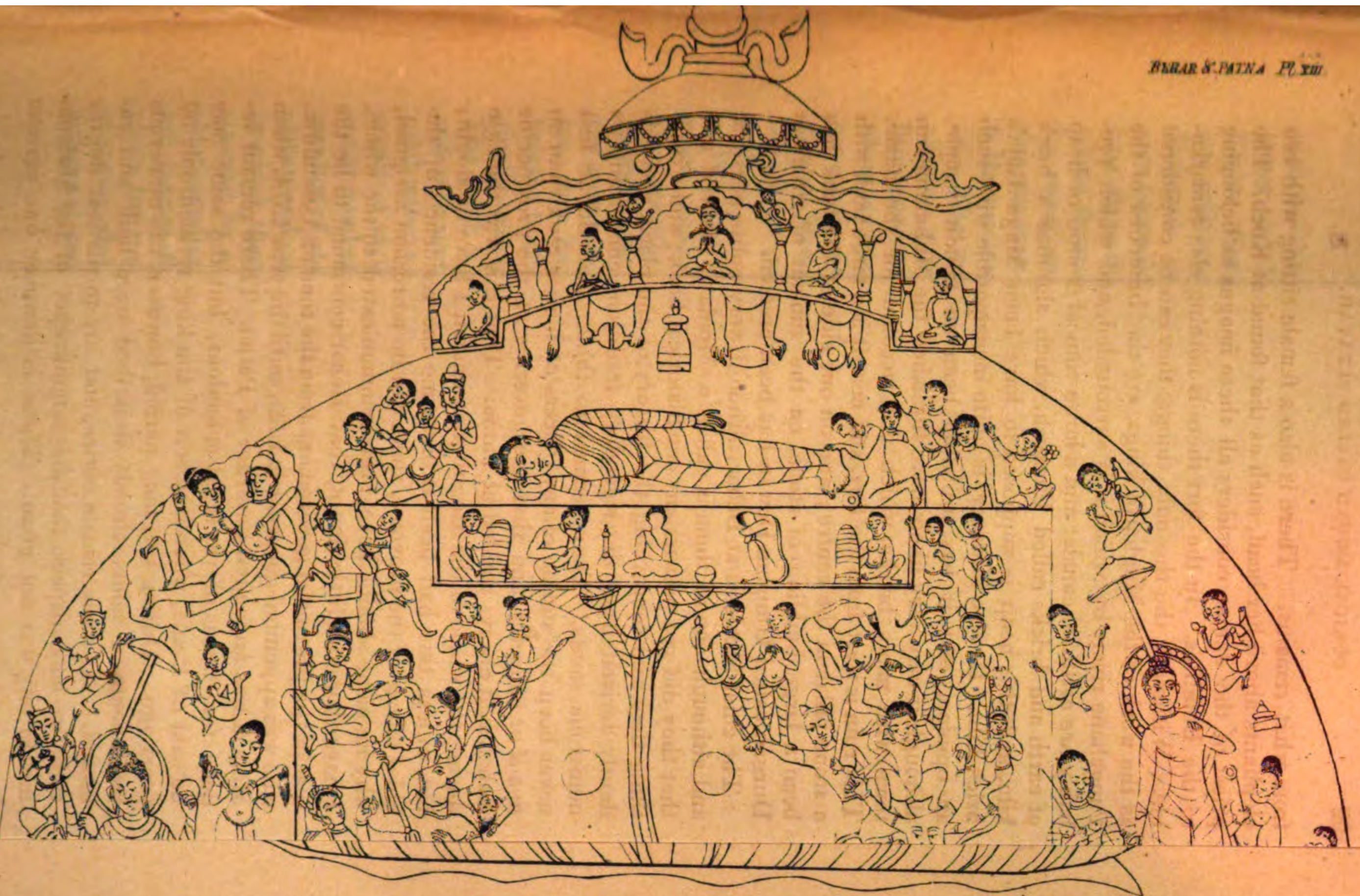
the Maghaiya Raja, and the former is by far the most common opinion. It is also most commonly said, that Maga Raja was expelled by the Muhammedans. This opinion, however, I have no doubt is ill founded, and is contradicted by several of a contrary nature. I have already repeatedly mentioned that the country as far west as the Phalgu, at least, and perhaps as far as the Son, belonged to the Bandawats, the chief of which tribe, at the time of the Muhammedan invasion, resided near Gidhaur. Further, the descendant of the first Muhammedan saint who arrived here, and that previous to the conquest, declares that when his ancestor arrived, the fort had been long deserted, was overrun with trees, and continued in that state until no remote period, which is confirmed by the report of the colony of Rajputs, by whom it is now occupied. Finally, we nowhere, either in Muhammedan history or Hindu legend, read of a Maga Raja. There was indeed a very celebrated person of that name, but he was a Brahman, and not a Raja. The other opinion, therefore, I consider as most probable, namely, that this fort was built by the Maghaiya Rajas, that is the kings of Magadha, and the era that was assigned for this, 15 or 16 centuries ago, is abundantly rational, and coincides tolerably with the period assigned by Major Wilford for the reign of the Andhra kings, who governed the Gangetic provinces, and were the most powerful kings of India. It seems, therefore, to have been about their period that this country, formerly called Kikat and Madhyades, took the name of Magadha, from the colony of Magas who had long before settled in it, but had then multiplied and expelled the Kols, in which they probably were assisted by the warlike tribe of Andhras from the west of India, to whose princes they willingly submitted.

The fort of the Magas at Behar is of a very irregular shape, and has been defended by a strong rampart of stone, cut in rude large masses from the adjacent rock. The foundations remain almost everywhere entire, and it is evident, that all the salient angles have been strengthened by round bastions. The ditch has been enormous. It is now entirely cultivated, and small canals wind through it; but, where most entire, on the east face of the fort, it would seem to have been about 600 feet wide; and on the west side, where narrowest, its width does not appear to have been less than 400 feet. The extent

of the heaps of brick within the fort shows, that it has contained many large buildings of that material, but no traces of their particular form remain. It is however probable, that they all belonged to the palace of the Raja, and that the town always surrounded the ditch; for the fort is said to have been measured by Mr. Law, and including the ditch was found to contain 500 bigahs of the country standard, or 312 acres, which agrees very well with its appearance. The gates would seem to have been entirely ruined before the Muhammedan conquest, but the family of a saint has taken possession of the strong outworks, which defended that on the south, and has repaired the breaches with various fragments of pillars and doors, among which one contains an image of a Buddha with several other figures. Except the family of this saint, and the Fakirs of Kaderkumbez, the only inhabitants of the fort, to the present day, is a colony of Rajputs. They say, that their ancestors accompanied as soldiers the first Mogul collector *(aumil,)* who was sent to manage the revenues of the adjacent county. The previous Muhammedan officers, had resided entirely in the town; but the Mogul deserted that, and erected a small mud fort in the south-east corner of the ruins, and in this the Rajputs, descended from his guard, continue to live. The mud fort is a complete ruin, and the house which the collector occupied, and which also served as an office (*kuchahari*) has now gone to ruin, although old people remember its having been still occupied. It has not been large, and is constructed entirely of clay, but has been neatly smoothed and whitewashed. It would not however be considered as fit for the residence of the lowest European officer of government, the want of security for property or appointments preventing the Mogul officers from expending money on buildings. On their arrival, the ancestors of the Rajputs are said to have found the town large, but the only habitation in the fort was the Kaderkumbez. About 15 years ago, when such deeds were no longer considered impious the Rajputs planted two trees in the old fort, and placed under each a small temple of Siva; and having found several old images scattered about the ruins, they placed them partly round these temples, and partly under a tree planted by a well, just without the rampart. Among these is a stone ornament, such as those found near Gaya, and containing four Buddhas, with an inscription so much defaced, that nothing can be concluded

from what remains. There is also a female sitting with two elephants above her head, such as that found at Koch. The priest of the Jainas considers all these images as belonging to the Buddhas. In the fort there is nothing else remarkable. Without it the the only things, that can be considered as the work of the Maghaiya kings, are the branches of the Pangchane river, by which it is surrounded, and which probably are artificial canals; and a large conical mound or heap of earth and bricks called Puzayah, which signifies a brick kiln, and this heap is supposed to have been Maga Raja's brick kiln. Its size however, is quite incompatible with such an opinion, and it has probably been an Hindu temple, although it may very likely have furnished the Muhammedan town with many bricks, which may account for the name. This ruin is west from the fort, and near it is a large tank with a stone pillar in the centre; and on one side of the tank has been a large building of stone, on the summit of which a Durgah called Gungam Dewan has been erected.

The chief Moslems at Behar, although very polite persons, and although one of them is called a Moulavi, assured me, that they did not possess any one historical book; and everything they said concerning the history of the place, was evidently derived from the legendary traditions concerning its numerous saints. They seemed to think, that Behar had never been the station of any officers of higher rank than an *aumil* or collector, and that the governor of the province or Subah had always resided at Patna. That this was the case during the whole of the Mogul government, I have no doubt; but, unless this had been at one time the residence of the chief officer of the province, there can be no reason assigned, why its name should have been communicated to the whole. I have therefore little doubt, that Behar continued to be the seat of the provincial government from the time of Ayasuddin, who was appointed governor in 1225, until the year 1574, when Monem was appointed governor of Patna. There remain indeed few traces of viceregal splendour, but the same may be said of Patna, where the son of the king resided only 50 years ago. During this long period, however, the numerous monuments of saints already described were built and endowed. As these remain entire, and are to the last degree rude, we may suspect, that the magnificence of the Muhammedan city was not great. There is however one mosque



with five domes, which is now very ruinous, but has been larger and handsomer, than any which I have observed in Patna. Some part of the *kuchahari*, or public office in the city still remains, and is said to have been built by a Mir Mahmud. I was shown the place by a descendant, a man very venerable from his age and appearance, but of a querulous disposition; and in fact he is a person of good birth, whose fortune is reduced to the ground, on which this building stood, and which may be about three or four acres. In this are many heaps and walls, but the only part at all entire is the mosque, which on the inside has been about 141 feet by 57. The walls and pillars have been built of rude masses of stone, probably taken from the ruins of the fort, and have been covered with plain work in plaster. The pillars are about six feet square, seven feet high and 15 feet distant. They have supported 21 domes of brick in three rows. This will give an idea of the taste, in which the mosque was executed. The other parts of the Subah's residence were probably inferior.

What is usually shown as the chief curiosity about the place, consists of a Bauli and Navaratna, that belonged to a wealthy Muhammedan family. This has since subdivided into many branches, and consequently, although the members still occupy the dwelling house of their ancestor, they have been reduced to such poverty, that it has become to the utmost degree squalid, and the buildings originally intended for pleasure are ruinous, and unfrequented. The Bauli is a square brick building half sunk into the earth, and surrounds a small octagonal court, open above, and sunk until water was found. This well was lined with brick, and a suit of eight chambers opened into the central area by an equal number of doors. These chambers again by an equal number of doors communicated with various galleries, stairs, closets and corners, included between them and the outer wall, in which there was only one or two small doors. The roof is covered by a thick terrace of plaster. The floor of these chambers has been sunk so low, that in the rainy season they are inaccessible; and even in January, when I visited the place, the water rose a foot on their floors; but in the heats of spring they become dry, and the water is confined to the octagonal court. The hot dry winds are then totally ex-

cluded; and it is said, that, during the day, the chambers are a cool and pleasant retreat. Buildings on somewhat a similar plan, with water brought in pipes to keep the well always full, but never to overflow, so as to destroy the floors and walls, would probably be a very great luxury.

Near the Bauli is a solid square building of one story, called a Navaratna from its containing nine chambers, one in the middle, one at each corner, and one at each side. These chambers, intended for entertaining company, are arched with brick, and had the roofs been high, and the doors large, might have had a good effect. The execution is very clumsy. Surrounding this building has been a garden divided into very small plots, separated from each other by narrow walks of brick and plaster, which contain small canals for watering each plot. There have been also in the garden some *jet-d'eaux* in small cisterns of brick and plaster. In this garden there is all the stiffness without the variety or neatness of the old parterre. It was however shaded by many fine trees scattered about without order. Such were the accommodations, which the more wealthy citizens of Behar had for the entertainment of their friends. I have no doubt, but that most of the present buildings have been constructed with materials from the ruins of the Maghaiya city, but among these I observed very few carved stones, or any thing, that could indicate that ancient abode to have been a place of splendor; and I am convinced, although Behar was the strong hold of the great king, where he secured his treasure and papers, that his usual residence was at a place now called Baragang, about seven miles west, where there are immense ruins, which I shall now describe.

These ruins are universally called Kundilpur, and supposed to have been a residence of Maga Raja, who built the fort of Behar, and I have stated, that by Maga Raja we must understand a dynasty, and not a single prince, and that this dynasty probably was that called the genuine Andhras by Major Wilford, who according to him began to govern about 80 years after the birth of Christ, and continued to possess the sovereignty for about 120 years. I have also already mentioned, that the Jain priest at Behar states this to have been the residence of Raja Srenik and his ancestors, petty princes governing the vicinity, and who preceded the

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Buddh from Mounds near Baragang.

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Goddess near 2 Buddhs in Kapteswari.

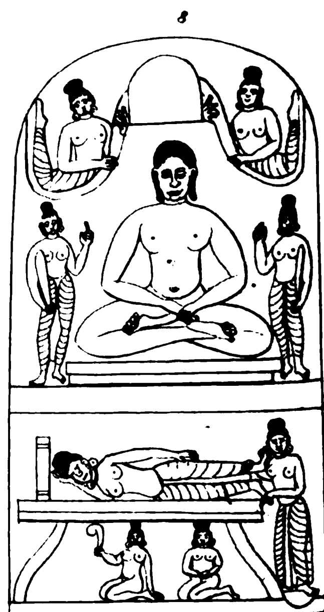
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At Kapeswari, near Baragang.

8



Buddhist in the Temple of Siva at Rajagriha.

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commencement of the Andhra dynasty by six or seven centuries. In the time of Srenik, it is probable, that Pompapuri was the name of the place, as it is also known by that name, although I am not certain, to which of the two dynasties I should refer the two names; but I have chosen to refer the most common name to the dynasty of by far the greatest consequence. The priest says, that in the time of Srenik, the bulk of the people worshipped the Buddhas, and he disclaims all the images and ruins of the place as belonging to these infidels, and alleges, that Srenik built only one temple, which was dedicated to Gautama, the favourite disciple of Mahavira, who died on the spot. I have already mentioned, that the worshippers of Gautama Buddha allege, that he died at Pawapuri, and according to Mr. Colebrooke the Gautama of the Jain is a different personage from the Gautama of the Buddhists, and is merely a name given to Indrabhuti the chief disciple of Mahavira, as being of the tribe of Gautama. It is however remarkable, that the times assigned for Mahavira by the Jains, and for Gautama by the Buddhists nearly coincide, and that this temple dedicated to the Gautama of the Jains, according to the Yati, should have been called Buddha Mandal. No traces of the temple of Buddha Mandal remain, and the only building belonging to the Jain near Baragang, according to the priest, was built about 250 years ago by Sangram Saha, a merchant, and dedicated to Santanath, one of the 24 Avatars. Srenik betook himself to a religious life, and left no heirs, nor has there since been any Jain Raja in this vicinity; and I look upon all the ruins here as belonging to the Maga Rajas, who must evidently have been of the sect of the Buddhas, and indeed the term Maga and infidel are now usually considered as synonymous.

South from the village of Baragang is an immense mass of ruins, through which may be traced the foundations of many brick walls and buildings, among which arise several conical mounds, that seem to have been temples. Near the village on its south side is the small temple of Jain, evidently built on the ruins, and surrounded by a garden and brick wall. The doors as usual are so small, that one must creep through them. It is in very good repair, but is very slovenly, and is in charge of a Mali, no one of the sect residing near. By

far the most conspicuous part of this ruin is an immense range of building running north and south, near the west side of the above mentioned mass, for about 2000 feet, and in general about 240 feet wide. It has consisted of seven nearly regular quadrangular courts, surrounded by buildings, commencing near its north end, together with a great mass of irregular buildings towards the south. I think there can be little doubt, that this was the palace of the Andhra kings. It has for ages been a quarry for bricks, and the devastation goes rapidly on, but still great quantities remain. On the east side of this range, which I suppose to have been the palace, is a larger heap of ruins, no one member of which, however, approaches to the enormous dimensions of the royal abode, although some of its buildings seem to have exceeded 300 feet in length. It seems to have consisted of various scattered parts, the abode of the chief courtiers and officers of government. Among these may be traced some temples rising in conical mounds. At the largest of these, nearly opposite to the middle of the palace, are two very large images: one a Buddha, the other a female supported by two lions. North some way from thence, near the small mound, is a great statue of an armed female deity with three heads, one of which is Porcine, and many arms. From its size, this image probably was the object of worship at the temple, the ruin of which has left the above mentioned mound.

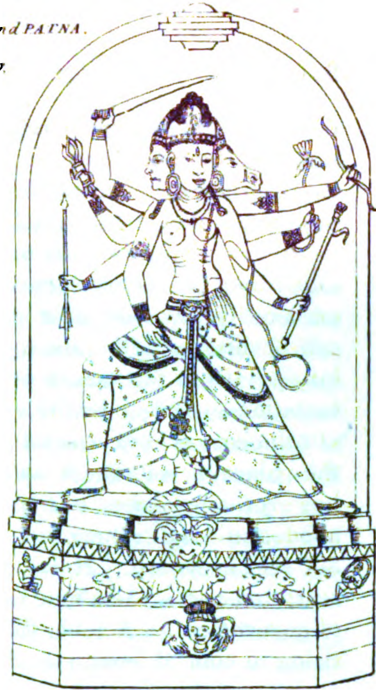
Helsa.—The division consists of three parts. 1st. A narrow strip along the Ganges called Tariyani, exceedingly populous and well cultivated, like the other similar parts already described. 2d. A low space called Tal, south from the above, and liable to inundation, which resembles entirely the adjacent parts of Bar and Phatuha already described; and 3dly a more extensive plain but elevated part, exceedingly well cultivated and planted, and very productive of rice. Twenty-five houses are built partly of brick. There are about 250 houses of two stories with mud walls and tiled roofs; and 1000 similar, but thatched: one hut in 32 may have mud walls, and a tiled roof; one in 64 may be a round hovel like a bee-hive, all the remainder have mud walls, and are thatched, chiefly with rice straw. Helsa is a town containing 300 houses. Nawada is a large place consisting of about 2500 houses, in consequence of which it is called the

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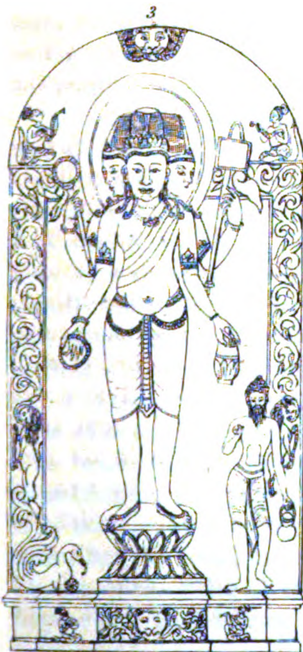
A large Image from Baitak Barrobh.

2



Goddess in Kapteswari - Baragang.

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Brahma - in Baragang.

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Image in Kapteswari - Baragang.

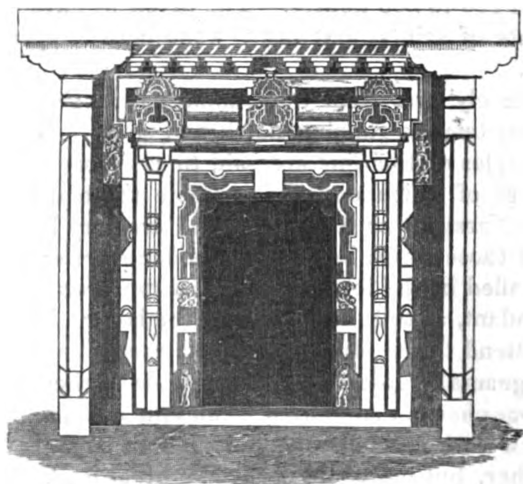
London . 1838 . W. H. Allen & Co. 7, Leadenhall St.

great Nawada, in order to distinguish it from the capital of the division of that name, which is a petty place. Tilara also is a large town, containing 2000 houses. Yogipur contains 600 houses. Surari, Nubigunj, Ekanggardihi, and Jaitiya are small towns containing from 100 to 200 houses.

Holasgunj.—This is a very highly cultivated level country, diversified by numerous rocky hills, that spring from the plain like small islands from the ocean. The country is also finely planted, and to be complete wants only the ornaments of comfortable abodes for the lower orders, and of architecture in those of the wealthy. Two houses are constructed of brick; 50 with mud walls and two stories are covered with tiles, and 100 of one story have the same covering; one house in 32 is supposed to have two stories, mud walls, and a thatched roof; 400 are round hovels; the remainder are huts of one story with a thatched roof and mud walls. Holasgunj is a very petty place. The chief town is Islamgunj, which contains 3000 houses; Khoday-gunj is also a considerable town with 1000 houses; Lakhawar has 500; Hathiyawang 325; and Asa-saray, Bauri-saray, Sarbahada-saray, Khezurgunj, and Vishnugunj, are small places containing each from 100 to 200 houses. The Moslems have about 200 monuments of saints; but many want both keeper and endowment.

Immediately west from the temple called Parsanath is a line of four temples running north and south. The two extreme temples of this line are said to be those of Kanaiya, the images of which entirely resemble those usually called Lakshmi-Narayan, or Vasudeva, and are very large. I believe that those which have two attendants on each side are usually called by the former name, and those which have only one attendant, as this, are called by the latter; but I did not at first attend to the distinction, and cannot say whether or not it is generally observed. The temple furthest north consists of one chamber supported by antique columns of granite. The brick-work had fallen, and was rebuilt by Raja Mitrajit's grandfather, but has again decayed a great deal. The door is of stone, and is highly ornamented. The original sides remain, but the lintel has been removed, and its place supplied by one of the sides of the door of Parsanath, which will perhaps show that before the repair was given the temple had

been so long a ruin, that its door had been lost. The southern temple of Kanaiya is an entire ruin, but the image remains in its place. The central temple next to this is the most entire, and contains a large image, called Surya, and very nearly similar to that of Akburpur. On one side is placed the usual figure called Lakshmi Narayan. The temple consists of a flat-roofed natmandir porch, or propylæum, and of a pyramidical shrine or mandir. The roof of the former consists of long stones supported by stone beams, and these by columns. The interstices of the outer rows are filled with bricks to complete the walls. The shrine, except the door, is constructed entirely of brick. Both the door of the shrine and the stone-work of the porch are of much greater antiquity than the parts that consist of brick, which have probably been several times renewed; but there is no appearance that the image or stone-work has ever undergone alteration; and this seems to be by far the most ancient temple of the district that still remains tolerably entire. The annexed engraving is a representation of the door with the two adjacent pillars, and between them the beam of stone,



Door of the Temple of Surya at Dapthu village—Thanah Holasgunj.

3



Surya.

7





...at Dapthu.

Bhairav of Dapthu - similar one at Koch.

which supports the flags that constitute the roof. The porch consists of four rows of columns, the interstices between the two outermost of which, as I have said, are filled up with bricks to form the walls. Round the porch, but not built into the wall, have been placed a row of small images intended as an ornament, and not at all consecrated to worship. They were placed in the following order:—A Surya similar to that worshipped; a Jagadamba, as usual, killing a man and a buffalo; a Haragauri, as usual; a Ganes dancing as that at Dinajpur; another Haragauri, as usual; a Lakshmi Narayan or Vasudeva, as usual; another Surya; a male called Vishnu, like Vasudeva, but in armour; one called Gauri Sangkar represents a male sitting between two females, and leaning one foot on a crocodile. There is here neither bull nor lion, as in the common Gauri Sangkar, or Haragauri. Another Ganes; another Gauri Sangkar, like the last; a Narasingha in the form usual in the ancient temples of this district; a strange male figure, called Trivikrama Avatar, which I have seen nowhere else; a female sitting on a bull, and having a porcine head, which is called Varahi, but is quite different from that so called at Baragang, nor have I seen it anywhere else; although among such immense numbers of images, as are scattered through this district, many may have escaped my notice. On the outside of the door is a very curious sculpture, which is called Bhairav, but seems to me to represent a prince riding out to hunt the antelope. He is accompanied by archers, musicians, targeteers, women, dogs, &c. The animal on which he rides, is by the natives called a sheep; but I presume was intended to represent a horse. The last temple of the place, immediately north to that of Surya, is an entire ruin, and has contained an immense Lingga, before which is placed the form of Gauri Sangkar, that is common at the place. Some distance, perhaps a mile, north from the above mentioned temple is a great pillar of granite, which has become an object of worship, and the Pujari, who is a Brahman, has obtained an endowment in land. The pedestal shaft and capital are, as usual here, of one piece, 53½ feet long. The capital and pedestal are quadrangular; the former is 86 inches long and 36 in diameter; the base is 70 inches long, and 40 in diameter. The shaft has 16 plain sides, and 38½ inches above the pedestal

contracts its diameter suddenly by about 3 inches. The sides are quite straight and well cut, but are not polished. The pillar is lying horizontally, about half of its thickness sunk into the earth, and is placed in the midst of a cultivated plain without the smallest trace of old buildings or tanks near it. In the pedestal and capital are two cavities like those of a mortar used for beating rice, which are shown as the marks made by the heads of two anonymous gods who brought the pillar from Nepal. This and its powers are all that the Pujari can relate concerning this great work. It entirely resembles the granite of the Barabar hills, has probably been cut there, and has been carried so far on its way to Kundilpur, when the difficulty of transporting so enormous a mass by the mere rude labour of man has overcome the power of the despot, by whom it was intended as an offering to his deity. The people of this division have a contention with those of Gaya, and pretend that Rama performed the offerings to the gigantic Asur on that part of his body which extends to the north-east corner of the Barabar hills, and they contend that, much inconvenience in attending on the pilgrims to such a distance having been experienced by the Gayawals, these priests set up a new Ram-Gaya of their own, which I have mentioned in my account of the sacred places that are their property. This account is far from improbable, and on the Vishuwa-Sangkranti from 10,000 to 15,000 assemble on the west bank of the Sungr river, where there is a plain above a mile in diameter surrounded by small hills and rocks, and called Ram-Gaya. In the middle of this plain is a round hill named Murli, to the summit of which a road has been formerly made, probably to some building, of which a few traces remain. Throughout the plain are heaps of bricks and stones, but whether the remains of a town or of temples it is impossible to say: the former, from the extent, is the most probable opinion. At the place where the assembly is held is a small temple of Siva, but it is quite modern. The most remarkable objects in this plain are some caves in the southern face of the northern arm of Nagarjuni hill, which is a ridge of granite so narrow that in several places light is visible between the masses of which it is composed. It consists of two arms bent like a horse-shoe, but the southern is the longest, and bounds the plain of Ram-Gaya on the south; while the

northern arm, after sweeping round by the west, projects into the plain, leaving a deep recess, in which are the caves to which I allude. Before these caves are the foundations of some buildings. First a heap of brick, then a wall of stone, forming with the hill an oblong area, in which there is a heap of brick and a well. The west end of the area has been shut up by a building of brick, about 50 feet long by 30 wide. It has contained many stones, partly such as that of the Vishnupad and partly granite. In the rock immediately to the east of this building, and within the area, is a cave, with a single small door about 10 feet wide and 15 long. The whole inside has received an imperfect marble polish, and the roof is arched, but is not above nine feet high in the centre. It is called the Mirza Mandai, or house of the Moslem noble, but on the door are several inscriptions in different Hindu characters. Some were quite illegible by my people; others are an old form of the Deva-nagri, and the characters are legible enough, but merely mention a person's name, Karma Marta, a Jansi or astrologer. Some of the lines appear to be the original inscription, while others are subsequent scrawls made by various visitants. In the north end of the building has been a small chamber, with a stone door leading out into an area between two masses of granite. In one of these is another small door, leading into a cave similar to the last, but a wall of brick has been built across it towards the far end, leaving behind it a small chamber, the only access into which is by a window, through which a slender man might creep. This cave is called the abode of Haji Hurmayen, the saint who, as before mentioned, expelled Nagarjundeo from a neighbouring cave. Over the door is an inscription, which seems to be in the same character with the longest inscription on the cave called Merza Mandai. On the sides of the door is a great deal of writing; the character was not known to my people. The brick buildings adjacent to these caves are attributed to a Nawadiya Saiud, but the people know nothing of when and where he lived. It is possible that a Moslem may have built a house here, and may have used the caves as a place of concealment for his treasure; but they are undoubtedly of Hindu workmanship, and, from the obsolete nature of some of the inscriptions, are probably of great antiquity. In the same cluster of hills are several other caves,

evidently connected with the above in the era of their formation, and I shall now proceed to describe them.

On the southern face of the southern branch of the same hill is the cave said to have been the residence of Nagarjundeo, and afterwards the Chellah of the great saint Haji Hurmayen. It is situated about 150 yards from the bottom of the hill, following the ascent of the stair. A small door in the face of a perpendicular block of granite leads into an oval cave 43 feet long and 18 feet 10 inches wide, the door being in the centre of one of the sides. The walls rise about six feet perpendicular, and the roof is arched, 10½ feet high in the centre. The whole has a marble polish, but not perfect, as the chisels used in cutting the rock have in many places penetrated deeper than the surface, that has been polished. There is not in the whole the slightest moulding nor onament. A small brick platform at one end, as I have said, is called the Chellah of the saint. Although the whole is perfectly dry, the air within is hot and noisome. On the rock above the door is an inscription rather defaced, and on the left side of the door, entering, is a very long inscription; both evidently in the same character with that on the side of the door of the cave last described, and a Pandit of Dravid, whom I met at Gaya, assured me, that it was a Nagri called Nandi, and in common use among the learned of Haigar, the country on the coast of Malabar, which in my account of Mysore I have called Haiga. He seemed to read it with great facility, and the Pandit of the survey was directed to write the whole in the Deva Nagri character, but he wrote only some part, and cannot tell, to what parts of the original each copy refers. According to the interpretation, which he gives, these inscriptions have no reference to the caves. One refers to some donations made at Gaya; namely, a bell to the Vishnupad, a pillar to Gadadhar, and a temple to Yama given by Vijaya Singha, son of Arjunpratap Singha, son of Mahimandal Singha, son of Vira-raja Singha, son of Rana-rangga Bhupala Singha king of Kamboja, who has many titles, in the era of Salivahan 662 (A. D. 739); but the year seems not to be understood by my people. It is expressed in letters, and not in cyphers, and is written, as if in English we should write two six six, which they say is to be reversed in calculation.

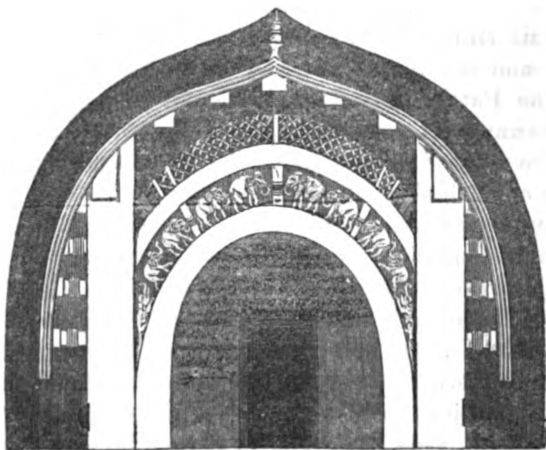
Another part of these inscriptions states, that Humira

Raja of Kampilya built a temple of Pundarikaksha at Gaya. Another states, that Baijala Lord (Bhudhara) of Mudgal, built a temple of Dhurjati, I presume one of Siva on the top of an adjacent hill in the year of Salivahan 1499, which, according to the reckoning in the south of India, is the year of our Lord 1576. In another, it is stated, that a certain Sudharmakar rendered himself celebrated by employing Mulanarendra to build a temple of Lokanath on a hill in the year Sudartik, but of what era is not mentioned. These inscriptions therefore have been made by pilgrims who came to Gaya, and chose the caves as a convenient place for leaving the celebration of their piety. On the right hand side of the same door is a short inscription, which is probably also some modern scrawl made by a pilgrim. The inscription over the door seems to be very old, and is probably coeval with the cave.

About three quarters of a mile west from Nagarjuni is another set of caves called the Satghar or seven houses. Near the south-east corner of Barabar hills, a small torrent named the Patalgangga descends from a narrow rugged recess in the mountains, and is esteemed holy. From 20 to 50,000 people assemble on the 14th of Bhadra, and on the day following bathe in its pools; but besides those about 500 bathe daily during the whole of that month. It is the property of Sambat Barati, a Sannyasi, who takes all the offerings, but certain Brahmans are allowed to read or repeat the ceremonies, and obtain presents. Beyond the narrow glen, in which the Patalgangga flows, is a small rugged plain recess in the mountain, surrounded on all sides by its peaks, and to which the only tolerable ascents are by two narrow passages that are on each side of a small peak. Both passages have been shut by walls; but in one of these walls there has been left a gate, some pillars of which still remain. On arriving by this into the plain, you have on your right a small ruined tank, and the left a low ridge of granite, in which have been dug three caves. One faces the tank, and the rock at the door has been cut perpendicular, leaving at each side a small projection, on the projection on one side of the door are three images, much defaced. One has evidently been a lingga. The other two seem to have been males with two arms, and in an erect posture. They are called Gauri Sangkar, but have no kind of resemblance to either of the figures usually called by the name. This cave has only one door, is about 16 feet wide

by 40 long, and about seven feet high to the spring of the arch. It is polished like those of Nagarjuni, and equally devoid of ornament. On either side of the door is a short inscription in a vile character. This cave is called Karna Chaupar, and is supposed to be the place where Karna, the brother of Yudhishthir, passed some years in prayer.

In the opposite side of this ridge are two doors. One of which is plain, and on each side has engraved a few words of the same vile straggling character, that is on the door of Karna Chaupar; but above the door is another inscription, in a character similar to that above the door of Nagarjuni, which I consider as probably coeval with the caves, the straggling characters being probably some scrawling of pilgrims. This door leads into a cave, much like that of Karna Chaupar, which is called the abode (*mandai*) of Sudama, the brother of Krishna. At one end of the cave is a niche, at the other a door covered by a kind of cornice, and leading into a circular chamber, which has no other communication with the external air. The floors of these chambers were covered with about a foot of dirty water, which had run in by the door, as the roofs are quite compact and water-tight. The other door, of which the annexed view is given, is very rudely



Door of Lomas or Romas Rishi's Cave.

ornamented with sculpture, and contains an inscription of considerable length, which seems to be in the same character with the Nandi-nagri before mentioned, and probably very modern. The original intention seems to have been to form within this door two chambers similar to those of Sudama; but although both have been to a certain length excavated, neither has been completed nor polished except in a few places. The place therefore, in all probability, was never occupied; but it is said to have been the abode of a certain Lomas, or Romas Rishi, a very hairy saint of remote times.

Passing from this granitic ridge towards the entrance into the plain that is shut by the wall, you come to a cavity in the left side of the narrow passage. It is cut into the granite, and is about seven feet high, seven feet wide, and nine deep. At its far end is a door, and within that it seems to have been intended to make a chamber, but after having made an excavation of a few feet in diameter, the workmen have relinquished the undertaking. This excavation has an inscription in the same character that is found over the door of Nagarjuni. All these caves are said to have been the work of Karna, and I have no doubt are the work of one and the same period. Though destitute of taste or beauty, and although they are noisome dens, fit only for ascetics, they must have been very costly works; but why they have been fortified it would be difficult to say. On every side but the two walled passages they are surrounded by precipices of exceedingly difficult access; and Karna may have been a prince whom political necessity rendered an ascetic. I am however inclined to connect the palace of Karna Raja, a little east from the old town of Ram-Gaya, with that ruin, and with these caves, which may have been the abode of the Gymnosophists by whom he was guided; and these caves again I connect with the temple of Buddha Sen, which is a little further west at the foot of the detached peak of Kauyadol, as has been already described. This is confirmed by both the works at Kauyadol and at Karnagar being attributed to the Bandawat Rajputs, many centuries later than Karna, the brother of Yudhishthir. On the peak of Barabar, called Suryangka, which in one part bounds the little recess of Satghar, is placed the temple of Siddheswara. The Lingga, which represents this deity, is supposed to have been placed

there by Ban Raja, of whom I have given an account in the topography of Dinajpur; and, strange to say, it is in obedience to the orders of this infidel (Asur), that the people worship in Patalgangga. On the outside of the temple, in a small porch, are two large images, called Bhairav, Bhairavi, although both are alike, and represent the spouse of the great god with her two sons. One of them has an inscription, which seems to consist of various scrawls made at different periods. One only is legible by my people, and merely states that a sinner had written it, but the sinner modestly conceals his name.

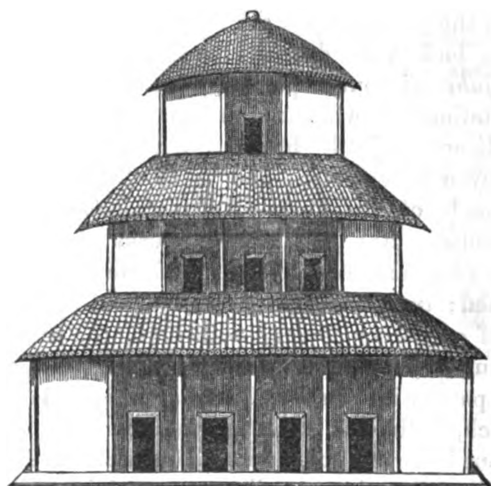
The number of people who receive instruction in this division has increased the influence of superstition. At Udaravir, a little north from Ram Gaya, a Rajput, about 200 years ago, was killed by a tiger, and became a devil. A temple, under the denomination of a Pindi, has been erected to quiet him; and the same has been the case with Thethari Pal, a Dosad killed in the same place and manner. Another Udaravir has obtained the honours of a devil *(bhut)*, by having been killed in war by the Kol. Every Monday and Friday from 20 to 50 people make offerings, entertain Brahmans, or give sacrifices. During the whole time a person of the Koeri caste, who is called the Bhagawan Bhakta (worshipper of God), sits by the monument, speaks nonsense, and is considered as inspired by the demon. The office is hereditary, and it is alleged, that those who enjoy this privilege of speaking nonsense most unaccountably receive no emolument, the whole profits going to a family of Srotriya Brahmans. Many persons pray to Maha Maga as to a gram devata, and each low caste has its own deities, who are worshipped in the same manner.

JAHANABAD.—A small portion of this division is, or rather has been slightly inundated; but it is said, that for some time the inundation has been gradually decreasing, and for two or three years has been scarcely observable. The whole is a fine level country fully cultivated, and beautifully planted. There are three brick houses, one of which is an old Dutch factory: 200 mud houses of two stories are almost all tiled. There are 400 houses with tiled roofs, and one story high, with mud walls, and 1000 round hovels like bee-hives. The remainder consists of huts with mud walls, mostly thatched with rice straw. Jahanabad is a good country town, con-

taining about 700 houses, with a cloth factory belonging to the Company, and dependent on Patna; and is the residence of a native agent for the making of nitre. The following small market towns contain from 200 to 100 houses; Kasisaray or Mostufabad, Tehatta, Kayemgunj, Paibigha, Kshemkaran-saray, Sekura, Tali, and Kinari.

DAUDNAGUR.—This division has been a good deal neglected, and the poorer lands are in general waste, and in the dry season look very dismal, being covered with stunted thorns (*jujubs*) without a pile of grass. There are however many plantations, in which much good land is wasted, as the poorer soils are perfectly fit for the purpose. Some of the best land even is neglected, and is chiefly occupied by poor looking woods of the Palas (*Butea frondosa*). There are 15 brick houses, 200 mud walled houses of two stories covered with tiles, and one-sixteenth of the whole are similar, but thatched: two-sixteenths of the whole are mud walled cottages of one story covered with tiles; the remaining huts have all mud walls, but are thatched, ten parts with grass, and three parts with straw. Daudnagur is a large country town, which, including Ahamudgunj, contains about 8000 houses; but is a very poor place. Some of the streets, however, in Ahamudgunj especially, are straight and wide; but the greater part consists of miserable crooked lanes called *gullies*. The best streets are very irregular, and often terminate in a lane, or are interrupted in the middle by a hovel. Daudkhan, in the part of the town named after him, erected a handsome inn (*saray*), surrounded by a rampart of brick, with battlements and loop holes, and strengthened at the corners by bastions. It has two large gates, and probably was intended as a strong hold; but called an inn to avoid the jealousy of government. It is occupied by many of his descendants, whom the subdivision of the property has reduced to indigence. His son Ahamud Khan built a real inn (*saray*) in the part of the town which has taken his name, that is, he allowed the inn-keepers (*bhathiyaras*) to build their huts by the sides of a long wide straight street, which he secured at each end by a mud gate, where a guard was placed to protect the traveller. The only other public buildings worth note are a small Imamvara in good repair, where the memory of the grandsons of the prophet is cele-

brated; and what is called a chautara, where the descendants of the above-mentioned chiefs occasionally sit in state, or to transact business. It consists of three stories gradually decreasing in size, and each surrounded by an open gallery covered by a pent roof, as in the annexed elevation.



The Chautara at Daudnagar.

The chautara is constructed of mud and wooden posts with a tiled roof, and is a very mean looking work, but is said to be an exact model of a celebrated building at Jaypur. That however is constructed of stone or marble; but the design deserves no recommendation, and seems to have been borrowed from the Chinese. Almost all the houses of Daudnagur are built of mud, and covered with tiles, and are more comfortable than the lower classes in the country usually possess, but in the whole there is not one fit to accommodate a person in the rank of a gentleman. It contains a cloth factory dependent on the commercial resident at Patna, and a factor of the opium agent at that city. Besides Daudnagur there are the following towns containing from 500 to 100 houses: Shumsher-nagar, Agahurgunj, Upraha, Hasunpurah, Humidnagar, Deohara, Awari, Goh, Obara, Bel, Ramnagar, Kodayo, and Bharar.

ARWAL.—This district in its appearance is similar to the last. A great portion is neglected, and where the soil is poor, is chiefly overgrown with thorns of the stunted *jujub*. Where the waste land is rich, it is overgrown with harsh long grass, which in the dry season loses all vegetation. The occupied lands are well planted. There is no dwelling house of brick. Twenty-five houses of two stories have mud walls, and are covered with tiles; 125 houses have two stories and mud walls, and are covered with thatch; all the huts have mud walls; 200 are round hovels like bee-hives, 40 are covered with tiles, the remainder are thatched. The Darogah of police resides at Waselpur, which, including Arwal and Sabdalpur, nearly adjacent, contains about 125 houses, and is a very sorry place. The other places, that can be called towns, containing from 250 to 100 houses, are Mahullah, Belkhara, Telpahat, Kingjar, Bhadasi, Phirdarakpur, and Mahabalipur.

VIKRAM.*—This is a very rich level country finely planted, and every corner fully occupied. Three dwelling houses are built of brick. There are 400 houses of two stories built of mud, one half covered with tiles, and one half with thatch; 300 mud walled huts are covered with tiles; the remaining huts have mud walls, but are thatched, one part with grass or sugar cane leaves, and seven parts with rice straw. Vikram, where the officers of police reside, is a small town, containing about 80 houses, and the stables where the draught cattle belonging to the military station of Danapur are kept. The places, that can be called towns, containing from 500 to 100 houses, are Bhagawangunj, Pali, Pawat, and Lai. At Viswambharpur, a petty place, the Company has a subordinate opium factory.

* The map will explain the extent of the different divisions or thannahs; and the reader can judge of the relative condition of each by the details above given, which are abridged from the survey. But little material alteration has taken place since then.—[ED.]

CHAPTER IV.

INHABITANTS—THEIR SOCIAL CLASSIFICATION AND MANNERS—DISEASES, HABITATIONS, FOOD, CONDITION, &c.

In the topography will be found an account of the manner in which I have formed an estimate of the number of inhabitants in the city of Patna. In the town of Danapur the native officer of police, under the authority of the general, gave a statement of the number of houses. With regard to the other parts of these districts I have followed the same plan that I did in Bhagalpur and Puraniya: from various statements and considerations I have conjectured the number of men required to cultivate each division, and then made an allowance for the other classes of society according to estimates given by the most intelligent persons that I could procure. In doing this, however, I experienced much difficulty. In the districts hitherto surveyed, the distinctions of Sukhbas, Khoshbash, and Chasas, are pretty clearly marked, the latter giving the whole agricultural population; but in these districts this division is unknown, and the people are divided into Ashraf, Bukals, Pauniyas, and Jotiyas. The Ashraf are a kind of gentry, and consist of the high castes, both Muhammedan and Hindu; namely, Saiuds, Pathans, Moguls, Brahmans, Kshatris, Rajputs, Kayasthas, and all merchants pretending to be Vaisyas, among whom are included the Jainas or Srawak. Some rich merchants of low tribes endeavour to squeeze themselves into this rank; but although admitted by their poor neighbours, their claim is considered illegal. Although the Ashraf have abundance of pride, and as little inclination to work as any other gentry, they have multiplied so enormously, that abstinence from manual labour is no longer practicable: and by far the greater part of them not only have lands, which they cultivate on their own account by means of servants or slaves; but a very large proportion cultivate with their own hands. The poorest of them, however, abstain from acting as servants, and they only work on their own farms. The profession of a plough-

man, on account of the labour which it exacts from the sacred ox, is by the Hindu considered abominable, and in order to shun degradation in the opinion of their neighbours, even the Muhammedan Ashraf in general avoid this labour. In some places, however, the Rajputs, Pathans, and military Brahmans, neglect this precaution, and the known ferocity of their habits secures them the possession of rank. The other poor Ashraf hoe, weed, sow, transplant, water, and reap their own fields, and hire men to plough. This will account for the large extent in many cases said to be cultivated by one ploughman: he has two teams of cattle, with which he works the whole day, and every other labour is performed by other persons. A few merchants also, as I have said, belong to this kind of gentry. The Bukals are traders of low birth, and abstain altogether from rural labour, although a few have farms; but these are cultivated entirely by servants. The Pauniyas are artificers; and many of these have not only farms, but hold the plough or labour the earth with their own hands; and either cultivate the ground, when they do not find employment at their trade, or one brother cultivates the farm, while another follows the duties of his profession. They often act as day labourers. The Jotiyas are those, whose proper duty it is to plough. A great many of these have no land, and partly act as servants, and partly as day labourers. The demand for such, owing to many of the ploughmen doing little other work, is very great on the farms of the more wealthy Ashraf.

A vast proportion of the Ashraf, consisting of a great part of the military Brahmans, Rajputs, Moguls and Pathans, consider themselves as soldiers by birth, and it was stated that in the two districts there were about 37,000 men who thought themselves dedicated by birth to the use of arms, who were willing to be employed as irregulars or messengers, and who have predatory inclinations, although of late this latter disposition seems to be on the decline. Of these about 4,500 are said to be employed at home, 4,600 had gone abroad in quest of employment, and 2,300 strangers have here found service. This, therefore, cannot in any considerable degree affect the population. The men of these districts are much better suited by personal endowments for this employment than those farther east are. The civil service produces no great

change. It is estimated that 3,800 men had left their respective districts for employment, that 2,300 strangers have here found service, and that 700 have come in search of employment. Almost the whole of the commerce is carried on by natives of these districts, or by people from other countries, who have been entirely naturalized. On the whole, the people here are of a domestic turn, have an aversion to going abroad, but at home are in general abundantly industrious. In the greater part, however, of Nawada and Sheykhpurah indolence is very generally prevalent, and towards the southern boundary of these divisions the habits of the people are almost as bad as those of the wilder parts of Bhagalpur.

When the English took possession of these districts by far the greater part was in a very wild state, and the southern half, after having been repeatedly plundered by the Mahrattas, had fallen into a predatory anarchy, very nearly as bad as that which prevailed in Bhagalpur. The Muhammedan chief of the tribe of Mayi, and the Rajas of Tikari at the head of the Domkatar Brahmans, were the principal leaders in these dissensions, which fortunately, however, were not embittered by the difference of religion. On that head the chiefs seem to have enjoyed a liberality that shames our European chivalry. Most parts of the district are as fully occupied as possible. The whole probably would have been so, had not some very large portions of free lands tended in some divisions to encourage neglect and sloth, and had not some remnants of the Ghatwal system ruined the southern boundary of Nawada and Sheykhpurah.

Except at Patna and Gaya, the manners of the women are exceedingly strict, and the men are intolerably jealous. In some parts I found it considered by certain classes, even of Hindus, as an intolerable outrage not only to speak of a person's own female connections, but even to mention the sex in the most general manner; and any discussion of the female customs gave many persons the utmost disgust. This jealousy prevails every where, except at Patna and Gaya, which I believe are the only places where there exists to a considerable degree any just ground for suspicion. Behar is nearly on a footing with Bhagalpur; but here the custom of premature marriage is not quite so prevalent; and it must be observed, that in these districts this custom is by no means such a

check on population as in Bengal, for there the girl usually is married when she is 10 years of age, but in this district the girl remains at her father's house until the age of puberty, and of course her children are stronger, and she is less liable to sterility. The same, I am assured, is the custom in the western parts of Bhagalpur. The effect of the virtue of the women, however, in increasing the total population can be considered as next to nothing, no places in the two districts having increased more rapidly in population than the vicinities of Gaya and Mungger; both places as corrupt as any in India, and perhaps not much inferior to London. The great number of persons of high caste in these districts augments very considerably the number of widows, who continue single; which is no doubt a trifling check on population.

The practice of inoculation for the small-pox is very general every where, except in the division of Behar, where the belief in the efficacy of prayer unfortunately prevails; and in Bakipur, where many Moslems reject the practice as an impious temptation of Providence, and where the attempts to introduce vaccination have occasioned restraints. The distinction of those who admit, and those who reject inoculation, has in general become hereditary;* but in the western parts of the Behar district I heard it alleged, that many families which formerly rejected inoculation had lately, at the instigation of the European surgeon at Arah, betaken themselves to the practice.

Fevers are in general less common than even in the most healthy parts of Bhagalpur, and nowhere are near so prevalent as in the bad parts of that district. Every where at a little distance from the Ganges, except in the woods of Nawada, the country, for a warm climate, is highly salubrious, and the bad parts of it are not worse than Bhagalpur, which is reckoned one of the most healthy situations in Bengal. It is said that until within these two or three years, the country was still more healthy than it now is, a circumstance which seems to me highly probable, as it is now overstocked with inhabitants, and in all probability the mortality will increase, until it becomes as great as in the vicinity of Moorshedabad,

* This hereditary feeling with regard to inoculation is not confined to India. It demonstrates the danger of receiving opinions into the mind without a thorough investigation as to their truth.—[ED.]

which was a healthy country until overwhelmed with people. The autumnal epidemic is always most severe, unless it be in the wilds of Nawada and Sheykhpurah, and may be so there also, although I omitted to inquire concerning this circumstance. The febrile disease *(nakra)*, attributed to an affection of the nose, is very troublesome, the same person continuing for years to have attacks from six to 12 times a year. Fluxes are not so common as in the north-east of Bengal, nor are choleras frequent. The *sannipat*, or temporary swelling in the throat with fever, occurs at all seasons, but is not common. In some places it is called *nuzlah*. Both kinds of leprosy are nearly on the same footing as in Bhagalpur. The great leprosy *(kor)* is here divided into two kinds; the *rakta bikar*, which affects the extremities, and is supposed to originate in a diseased state of the blood; and the *sunbaheri*, in which the skin chiefly is affected. Sunbaheri is a Persian word, and a Brahman physician says that the Sangskrita name of this kind is Bad-Rakta, but he just reverses the application of the two names, and although Rakta is Sangskrita, *Bad* I believe is a Persian word. There is, however, reason to think that there are two varieties of the disease, that differ much both in symptoms and virulence; the one attacking the small joints and the other the skin, of which it renders large portions totally insensible. The prejudice against the unfortunate persons seized with this dreadful malady is so great that some of the lower castes, when seized with it, cause themselves to be destroyed. They are placed in a boat, and, a pot of sand being tied to their necks, they are carried to the middle of the Ganges, and there thrown over board. The people thus drowned are perfectly willing, both because they are miserable and helpless, and because they think that the sin to which the disease is attributed will be removed by their dying in the sacred stream; and they cannot afford to have the forms of expiation *(Prayaschitta)* performed, as is usually done for the Brahmans or wealthy persons that may be afflicted with this disease. The books of law *(Dharmasastra)*, I am told, condemn this kind of expiation by drowning, or rather say, that the expiation by ceremony *(Prayaschitta)* is the only one effectual; but a passage of the Mahabharat is interpreted so as to recommend the drowning, and, where perfectly voluntary, it perhaps

saves the unfortunate wretch from much worldly suffering. I saw no person that was entirely white, but I heard of eight or ten that are in that state.

The chronic swellings of the legs, throat, &c. are not, in proportion to the number of people, more numerous than in Bhagalpur. That of the throat is in general attributed to the persons having long resided on the northern side of the Ganges. I heard, however, of several instances of persons who had the disease, and who in the whole course of their lives had never left Magadha. There is, nevertheless, a great disparity in the proportions of those affected on the two banks of the Ganges; and I think that this can with difficulty be accounted for on any other principle, than some condition of the waters flowing from the northern mountains being the chief occasion of the disease, for in every part where this water flows the disease is common, although the climate of the northern parts of Bengal differs considerably from that of Tirahut. Rheumatism is not so prevalent as in Bhagalpur, owing apparently to the houses being much warmer. There is a species of lameness, called *kungj* in the Sangskrita language, and *maghaiya langra* in the vulgar dialect, as it is supposed to be peculiarly prevalent in Magadha, and in fact it is very common in Patna and its immediate vicinity; but I observed it nowhere else, although I am told that it prevails in every part of both districts. It attacks all ages and both sexes, and after continuing a year or two is considered incurable; but some have recovered after having been affected for several months. It seems to consist in a weakness and irregular motion of the muscles moving the knees, which are bent and moved with a tremulous irregular motion, somewhat as in the chorea, but not so violent. When the disease has lasted some time, and has become confirmed, the legs suffer emaciation. It is not accompanied by fever, but in the commencement is often, though not always, attended with pain. It is attributed by some to eating *khesari* (lathyrus-sativus), but this seems fanciful, for although in Magadha this pulse no doubt enters largely into the diet of the poor, it does no less so in that of those in Matsya (Dinajpur), where the disease is as rare as in any other part of the world. By others it is attributed to sleeping on *kodo* straw, an opinion which deserves more attention, for the grain of some fields of kodo possesses narcotic qualities, probably, owing to some weed

intermixed with the real grain, and the stems of this weed may emit narcotic exhalations very capable of affecting the health.*

ON THE CONDITION AND MANNER OF LIVING OF THE PEOPLE. —The sub-division of property has banished almost everything like the splendour of rank from these districts, except just about Patna, and there the natives of wealth are fond as usual of a numerous and disorderly attendance, and not only parade with the emblems of rank usual among themselves, but are emulous of European equipage.

Although the natives here are of a warlike disposition, and although all the higher ranks keep arms at home for their defence, they are fast abandoning the custom of going abroad armed, which is highly to be commended, especially among a people naturally inflamed with jealousy, and on that account inclined to assassination. Marriages are here still more outrageously expensive than in Bhagalpur, and are the principal cause of ruin. Funerals are much on the same footing as in that district. In Sheykhpurah the practice of hiding treasure in the earth is said to be still very general, and in other parts of the district the traders of low caste are generally accused of the same species of precaution; for which the number of house-breakers seems to be a valid apology. Everywhere on common occasions the Hindus of rank are exceedingly parsimonious, to which indeed they are compelled by their profusion at marriages. The brick or stone houses are in general built in a very bad style, with stairs, doors, windows, and chambers miserably small and awkward. The greater part are built with clay for mortar, but have flat roofs covered with plaster. The small number of houses, that are built of rough stones with clay mortar, where such materials are so abundant, is a clear proof of extreme poverty. In most countries so situated, the meanest hut would be built in this manner. Houses with mud walls and two stories are called *kothas*. In general, as in Bhagalpur they consist of only two apartments, one above the other, and what I have said in my account of that district is entirely applicable to most of those here; but in Phulwari especially I observed some large houses of this kind, and with care in smoothing and painting the clay, such may be made very neat and comfortable; but

* The ergot of rye in Europe affords an example.—[ED.]

externally at least, little or no pains are in general bestowed on these operations, and the walls are more rough and unseemly, than could be well conceived. With respect to the inside I cannot judge, the manners of the natives precluding strangers from the interior of their houses. Many of these *kothas* are tiled, and for people of easy condition such houses seem the best fitted in the present state of the country. It is true, that the tiles require constant repair, and that without precaution, they are intolerably hot; but a slight terrace of earth over the upper story, and under the tiles, would entirely obviate this evil. Many of the kothas are however thatched, and in most parts of these districts this is an unpardonable waste of forage, for grass fit for thatch is too scarce to be in general procurable, and straw the only dry forage, is commonly used. In some parts the terraces of earth, which serve for floors or ceilings, are strengthened by the addition of the calcareous concretions called *kangkar;* and, where these are plenty, this seems to be an improvement, as it renders the floor harder, and not so easily penetrable by rats, snakes, and other vermin. Where the kangkar is not found, broken pots would probably be equally effectual. Most of these kothas have wooden doors and window-shutters; but these are to the last degree rude, and are seldom if ever painted. Glass, or even mica although very plentiful in the district, are quite out of the question; although in the cold or rainy seasons either would be very comfortable, and the mica would have the advantage of concealing entirely the women, while it admitted light.

In Gaya and Patna the chief ornament of the houses consists of carved wooden work in the front of the galleries, and in some few houses, both of brick and mud, this has a tolerable effect; but it exposes the whole to the danger of fire, and should be discouraged. Some of the gallaries are painted, and amidst the dismal hue of naked mud, or slovenly brick walls, the gaudiness of the colours and tinsel, were they kept tolerably clean, would have a good effect, although the painters caricature the gods, heroes, and beasts, in the most barbarous manner. The huts here, although far from neat, and although dark and close, having seldom any aperture but one small door, are so far comfortable, that, having mud walls, they exclude both rain and cold, and are not so hot as those

made of bamboos, mats or reeds: some of them are tiled, and with a clay terrace under the roof. Wooden doors and glass windows are far indeed removed from hope; and as yet such houses, even without these extravagant luxuries, are almost entirely confined to wealthy artists and traders in a few country towns. The farmers and decent artists have huts similar, but covered with thatch, and in the construction of their roofs they are exceedingly rude. Although of the shape usual in Bengal they are too flat, and the thatch, which in that country is very neat, is here quite the contrary. The roof is commonly supported by the walls, and a ridge-pole running from one gable-end to the other, and, unless there is a gallery, has neither posts nor beams. Each hut usually consists of one apartment 11 cubits long by seven wide, to the front of which, if the occupant is a trader or artist, is added a narrow gallery to serve for a shop. If the family is numerous or wealthy, additional huts are built; but in common an ordinary family with all its effects is usually squeezed into such a hovel, and a wretched shed for cooking, and a hut for the cattle, complete a small farmer's dwelling; while the addition of a second hut, and of a granary like a large bee-hive, forms what is considered a comfortable abode. The huts built with walls of hurdles are confined to a few of the wilder parts of the district. Here even the huts shaped like bee-hives, and called *marki*, have usually clay walls, and are chiefly occupied by Rajwars, Musahars and Bhungiyas, all probably aboriginal tribes.

The fence round the yard, contiguous to which are built the various huts, of which a native habitation consists, is usually a mud wall, and in most villages there is no space intervening between these enclosures, nor is the area planted, while the thatch is not even defended by gourd leaves from the sparks of any fire, that may be kindled. Fires are therefore exceedingly destructive. On the southern boundary the houses are usually separated by small plots, which are sheltered by arbours of leguminous creepers, a good custom, which ought everywhere to be encouraged. In ordinary houses there is scarcely any furniture except bedsteads, earthen pots, a spinning wheel, and a rude knife cleaver, and such like implements. Persons in easy circumstances add some copper vessels; but carpets, chairs, tables, or anything like decent

furniture, are confined to a very few families indeed. Bedsteads are of the same descriptions as in Bhagalpur, and fully as common.

The Hindu men of rank have on high occasions adopted the Muhammedan dress, only they button their robe on the contrary side, while most of the Moslem women in ordinary dress use the Hindu petticoat or wrapper, while some Rajput women use long drawers like the Muhammedan ladies.* The wrapper and veil in one piece (*sari*) seems to be the proper female dress of Magadha, as the women of the Maghaiya Brahmans use it whenever they cook; but the petticoat (*lahangga*) and boddice (*korta*) from the west of India has made great progress, and more than a fourth of the whole women would seem to have adopted this dress. Turbans are in very general use among the Hindus, but the Moslems in undress frequently content themselves with a little muslin cap. The people here are not quite so scantily clothed as in Bhagalpur, but still the poorer classes suffer much from cold.

In Patna and the larger towns there are many clean people; but in country places, I think, dirt prevails fully as much as in Puraniya, and the lower ranks seems to have less shame in lousing each other in public, than I have any where else observed. This practice is in particular exceedingly prevalent in the city of Patna. Almost every man has leather shoes, and all those who can afford it use this luxury; but as a pair costs three anas, this indulgence must be managed, and many people, when on a journey, save their shoes by carrying them in their hand, and on approaching their quarters put them on for the sake of decency. Women of low rank wear sandals, so as not to conceal the beauties of their feet; but the higher classes of Hindu women consider every approach to wearing shoes as quite indecent; so that their use is confined to Muhammedans, camp trulls, and Europeans, and of the first class by far the greater part on this subject have adopted the Hindu notion.

One half of the female ornaments consists of brass, bell metal, tin, or tutenague; and of the other half two parts may be glass, and the remaining part may be lack; but the precious metals are much more used than in Bhagalpur, or even in Puraniya. Most of the Ashraf women have a gold ring in

* See drawing facing titlepage.

their nose; and some for their fingers and ears. The rich of the low castes have the same. In Patna, Gaya, Daudnagar, Behar, and Bar, a large proportion of the women is as completely bedecked with the precious metals as in any part of Bengal, and 400 or 500 families, chiefly in Patna, use jewels and coral. In Patna the women do not paint much; but in the country most of the Hindu women, whenever they wish to be fine, plaster their whole foreheads with red lead. The customs of anointing the body with oil, of blackening the eyes, and of tatooing the females are much on the same footing as in Bhagalpur; only that very little oil is used, especially by men. Children under three years of age, as is the case every where in Bengal and Behar, are daily anointed, if it can be possibly afforded. Cutaneous disorders are not more prevalent than in Bhagalpur.

The number of people who eat butchers' meat or poultry is much greater than toward the east. At Danapur an European kills very good meat; beef in the cold season, and small meat in the hot. A Muhammedan there also sells tolerable meat, beef, veal, and mutton; but this is entirely for the use of Europeans. Even the richest natives, I believe, do not care whether or not the meat which they use is fat. In Patna a great deal of meat is sold, but it is almost entirely that of goats, and very little beef is used by even the Moslems. Goat meat is also sold daily at Behar, Gaya, Daudnagar, and Bar, and in almost every division are some butchers that kill goats as often as there is a demand. Buffalo meat is not in request. Sacrifices here are not in very common use, except with the Brahmans, Rajputs, and Khatris, who eat only the meat that has been offered; all other castes are chiefly supplied from the butcher. The quantity of game procurable is very trifling. The impure castes have great abundance of lean dirty pork; fowls and pigeons are scarce, and there are no ducks. Fish is in general very scarce, and the fish are chiefly the small kinds found in reservoirs, which become dry in November. Milk is not near so plenty as in Bhagalpur; but as little *ghiu* (butter) is made, a great many people use milk, although not so many in proportion as in the above-mentioned district. Although goats are very numerous, their milk is seldom used, except by children or sick persons; and the cow and buffalo milk is most commonly curdled, and allowed to become sour before

it is used. However a good deal, perhaps six-sixteenths, is taken immediately after having been boiled; for the natives abhor milk, as it comes from the cow. The natives here prepare their food nearly as in Bhagalpur. The common relish given to their food is a curry, prepared of pulse fried with turmeric, oil, capsicum, and salt, as far as can be afforded. By those in easy circumstances curries are also made of meat, fish, and vegetables, succulent, or leafy. The Moslems use onions, and most of the Hindus use garlic, which is purer than onions, which are only used by the lowest Hindus, who often are unable to procure capsicum and turmeric. Brahmans and Rajputs reject both onions and garlic. A few very poor people, who cannot every day procure pulse, collect wild leaves, or superfluous plants of some common crop, such as mustard, which costs them nothing, but the trouble of gathering. In the towns acid seasoning in the form of pickles is a good deal used; but in country places this kind of seasoning is in little request. The quantity and variety of foreign spiceries used is much greater than in Bhagalpur. A great deal more ghiu is also used than in that district. By a large body of the people oil and salt are not procurable in abundance.

With respect to the oil, the quantity considered as a full daily allowance for five persons young and old, varied in different places from 20 to 6 sicca weight,* the average is 11 s. w. but the highest rate is that of Patna and Sahebgunj, which contain a large proportion of the inhabitants. The second class consumes from 10 to $2\frac{1}{2}$ s. w. the average $5\frac{11}{16}$ s. w. The third class is said to use from $4\frac{1}{7}$ to $\frac{1}{2}$ s. w. average $2\frac{3}{4}$ s. w. The fourth class is said to be unable to procure oil daily, even in the smallest quantity, and use it only on high occasions. As usual this estimate contains the whole allowance for the lamp, for unction, and for the kitchen.

The quantity of salt, said to be a full daily allowance for five persons young and old, varied in different divisions from 13 to $3\frac{6}{16}$ s. w. average $8\frac{7}{8}$ s. w. The second class was said to procure from $6\frac{1}{2}$ to $2\frac{1}{2}$ s. w. average 4 s. w. The third class from $3\frac{3}{4}$ to $1\frac{10}{16}$ s. w. average $2\frac{6}{16}$ s. w. The fourth class from 2 to $\frac{15}{16}$ s. w. average 1 s. w. Ashes are not used here

* The weight of a sicca rupee about 179 grs. troy.—[Ed.]

as a substitute for salt; but a great deal of a salt prepared in Tirahut (Kharinemak) is alleged to be used to adulterate the salt imported from Calcutta, which is mostly of the Bengalese manufactory. Until of late a good deal of salt was imported from the west of India; but means have been taken to stop this trade, which was contraband. Rice is here the staple article of food, except in Duriyapur, Bar, and Sherpur, where little grows, and where there is not wealth enough to enable the inhabitants in general to purchase their food, a large portion living on the produce of their own farms. In every part however of these districts the poor cannot daily procure rice, and live a great part of the year on wheat or other coarser grains, or even on pulse made into cakes or paste; and in a few parts the Mahuya flower, and the kernels of the mango and *kind* are occasionally used as a substitute for grain. The quantity of cleaned grain stated to be a fair allowance for the daily consumption of five labouring people, young and old, varied in different divisions from 320 to 480 s. w. and the average is 378 s. w.

In the Appendix will be found an estimate of the extent to which the use of various stimulating or narcotic substances is carried; and it must be observed, that on the whole these are more employed than towards the east, and that the use of fermented and distilled liquors especially, is much more general; yet the people are evidently more vigorous, fully as industrious, and by no means more inclined to crimes.

Most of the spirit distilled is drawn from the Mahuya flower, but sometimes the extract of sugar-cane gives a cheaper spirit, and is then used. The tax on this luxury has become very productive, nor have I anything new to offer on this subject. The people stated as being addicted to palm wine and distilled liquors, no doubt, are often intoxicated; but they do not so universally drink to excess as is usual in Bengal, where the act merely of drinking is considered so shameful, that no one breaks through the rule of strict abstinence, who has resolution to abstain from excess. Here, on the contrary, many Muhammedans even care not who knows that they drink; but, in general, the drinkers abstain from brutal intoxication. The people here do not in general use betle so much as towards the east; but still a great deal is consumed, especially by the Brahmans, who

either abstain from liquor, or conceal their cups, and many of them have their mouths constantly crammed; but in common it is used much in about the same proportion as in Bhagalpur. Tobacco is used in greater quantities, although not to such an extent as in Bengal. A good many women here smoke without shame, especially at Gaya, where the people are most sober, which induces me to suspect, that among the sex in other places, the want of the stimulus of tobacco is supplied by that of liquor. Fuel, in most parts of these districts, is very scarce and dear, and by far the greater part consists of cow-dung mixed with husks and made into round cakes.* Even in the town of Patna these cakes form by far the greater part of the fuel, and for eight or nine miles round, poor women attend carefully every herd of cattle, or even every plough, in order to procure a quantity sufficient. The common fuel used there by the rich, consists of tamarisks and mango-wood, which is very indifferent, and is exceedingly dear, 4 mans (76 s. w. a ser) or 298 lbs. costing a rupee. Near the forests, every one by his bed burns a fire; and, where fuel of any kind can be procured, this practice is general; but in most parts of the district a great many cannot afford this luxury, although stubble, and the woody stems of all kinds of crops that have such, and reeds, are carefully collected for the purpose. In the Appendix will be found an estimate of the proportions of the different kinds of fuel used. In the Appendix also will be found an estimate of the kinds of oil used for the lamp, and of the various degrees in which the inhabitants of different ranks and places enjoy this convenience. In Patna, some Muhammedans use tallow candles, and a few burn wax; but even the Raja of Tikari does not use this luxury, except on the highest occasions, although his clear income at the very least exceeds 40,000*l.* a year, which in this country is an immense sum. The quantity of oil consumed in religious ceremonies is very small; illuminations on such occasions being neglected.

Although the natives of these districts are exceedingly fond of a numerous attendance and showy equipage, very few, considering the richness of the territory, can afford to indulge in this propensity, although enormous sacrifices have

* River steam-navigatiom will convey the Burdwan coal to all the districts on the Ganges.—[Ed.]

been made in the settlement of the revenue by grants of free land. Raja Kalyan Singha, Raja Mitrajit, Bakurali-khan, Raja Jhaulal, Abbaskule-khan, Abumuhammed-khan, Nawab Mera or Janggali, Mokhtar Bahadur, and Balak-Giri Mahanta are the only persons of high rank that can afford to support their station with becoming splendour. The Nawab Bakurali has several carriages after the European fashion, but the other persons of high rank prefer the palanquin, elephant, or horse. The two-wheeled chaises after the fashion of Hindustan are mostly *hackereys* in the city of Patna. In fair weather from Bakipur to Chaok, a distance of about six miles, for going and coming, costs from four to five anas; for there is no regulated price. In the rainy season the price rises considerably higher. The four-wheeled carriages drawn by oxen (*raths*) are kept by individuals for their own convenience, and many Brahmans do not scruple to use them. Two-wheeled carriages drawn by oxen are here called *chhakra,* and many of them are hackneys standing for hire in the streets, or in country parts are let from stage to stage. Many of these carriages are provided with two bodies, and serve for either the conveyance of goods or for travelling, as required. Almost the whole of these carriages have their wheels fitted after the manner of Puraniya.

Very few of the ponies are used for the carriage of back-loads, and those that are not used in the chaises are kept for riding; but the people here have very little turn for that exercise. At all the inns (sarays) some ponies are kept for hire.

Palanquin-bearers are very numerous, and many go to Calcutta for service; but most of the bearers supposed there to come from Patna are in fact from Saran, and the two descriptions of people do not live together, those of Patna being chiefly of the Rawani caste, and those of Saran being mostly Kharwars. The former are the most addicted to intoxication. The grand employment for the bearers in these districts is found at marriages, and during three months, commencing about the middle of April, bearers cannot be hired to go any distance, nor without the utmost difficulty can they be induced to go even from one stage to another. Very few persons keep a regular establishment of bearers, but a great many keep palanquins, and hire bearers when they are wanted. Some bearers again have old-fashioned

gaudy palanquins suspended from an immense bamboo, and covered by a tilt, which they hire for marriages; some of the same kind richly ornamented are kept by great families. The others used by ordinary persons are in general exceedingly rude, and are of all the kinds mentioned in my account of Puraniya. The Chandols of Bhagalpur are not used in these districts.

The free male and female domestic servants are of the same kinds as in Bhagalpur, and receive nearly the same allowances, except in Patna and Danapur, where wages are a little higher. Some of the women servants are young, and none are commonly procurable of any age without wages as high nearly as those given to men. A great many poor women as in Bhagalpur gain a livelihood by carrying water for wealthy families, and are called Panibharin. The poor woman gets usually two paysas a month for each pot of water that she supplies daily; and, besides managing her family, and perhaps spinning a little, may gain monthly eight anas.

The slaves called *Nufur* and *Laundi* are very numerous, and nearly on the same footing as in Bhagalpur; but in most parts of these districts it is reckoned so disgraceful to sell this kind of property, that many masters who can give them no employment, and cannot afford to feed them, allow their slaves to do as they please, and to procure a subsistence in the best manner that they can.* Several masters in this situation having died without heirs, the slaves have become entirely free, no one claiming them. In Gaya and some other places the slaves are occasionally sold, and formerly usually fetched a rupee for each year of their age until they reached 20, when they are at their highest value; but in general the price has risen, and in many parts has doubled. The allowance given to slaves is in general more scanty than that given in Bhagalpur. By far the greater part, as in Bhagalpur, are of the Rawani or Dhanuk tribes, but there are some Kurmis. Such Kurmis, however, as have become slaves, are usually

* The term slavery in India is, in general, rather what in Europe was formerly termed feudalism. Forty years ago the E. I. Company put a complete stop to maritime slavery in the East, by declaring the commission of it piracy. The Government are now sedulously inquiring into the condition of those feudal classes, or bond servants, who have existed from time immemorial in Asia.—[Ed.]

called Dhanuks. Kurmis and Dhanuks born free occasionally give themselves up as slaves, when they fall into distress. All the Rawanis seem originally to have been slaves, although a good many, from circumstances above mentioned, may now be considered as free. Slaves of a similar description belonging to Muhammedans are called Molazadahs, and form a kind of distinct caste, which does not intermarry with the free persons of this religion, although the children, which the highest have by girls purchased for the haram, are considered as nearly, if not altogether equal to those by legitimate wives. Although slavery seems to be pretty universal wherever the Muhammedan law prevails, it would appear to be contrary to the precepts of their prophet; for in these districts they acknowledge that the purchase of a free man is illegal; and, in order to save their consciences, they take a lease of the man, who wishes to sell himself, for 90 years; the children born during the lease are held as slaves without any scruple. The number of domestic slaves belonging to Moslems of rank, such as I mentioned in the account of Puraniya, I could not ascertain.

The number of common beggars that were estimated to be in the whole of these districts amounts to about 4,200; but they are not near so importunate as in Bhagalpur, nor does the base spirit of mendicity, so common there, extend to these districts. The necessitous poor are however abundantly numerous, and their condition is nearly similar to that of the unfortunate in Bhagalpur, the doctrine of caste producing the same evils. The people here are however more straitened in the means of giving relief to the necessitous by an enormous number of religious mendicants, whose impudent importunity exceeds the usual measure of patience. Many of them are no doubt objects of real charity, being infatuated pilgrims, fleeced of every thing by various knaves and reduced to the utmost distress by want and disease; but the greater part, were not their character sacred, would be fit objects for the scourge of police. Many people also, who are really necessitous, finding themselves deprived of assistance by these religious mendicants, have assumed the character, which must be considered as a very venial offence. Among the beggars may be enumerated 54 societies of Hijras, who, I have strong reason to suspect, are used for illicit purposes, by which their subsistence is chiefly procured. They are

employed by the poorer classes, while the dancing boys called Bhaktiyas, are engaged by the great. No less than 30 of the societies reside at Daudnagar, from whence the exertions of a saint banished all prostitutes.

Considering how many large towns there are in those districts, the number of prostitutes is very small, and the petty town of Ronggopur, with the division immediately adjacent, contains more than the whole district of Patna city. In Behar the number is very trifling, and nearly in the same proportion to the number of inhabitants as in Bhagalpur. Almost the whole is confined to the town of Gaya, where there is always a most promiscuous crowd of strangers, and a very dissipated and numerous priesthood; and to the division of Daudnagar, where an attempt at extraordinary sanctity seems to have called the vicious propensities of the men into more than usual action. A Muhammedan saint, who some time ago had great influence in the town of Daudnagar, issued an order, that no prostitute should be permitted to reside near his abode, or tomb, and the order, as far as the letter, has met with strict obedience; but in all the villages round there are the houses of an uncommon number of prostitutes, and they frequent the town, whenever there is occasion.

In the district of Behar all the prostitutes are Muhammedans, and their number is kept up by purchases from the west of India, or from the country north of the Ganges, the parents here scorning to sell their children. In Patna also the greater part of the prostitutes are Muhammedans; but there are many Hindus partly Rumzanis, partly Khatranis, and partly Bengalese. All the Rumzani women are prostitutes, and the men musicians; but they adopt girls of any caste, whom they procure by purchase. The Khatrani prostitutes form only a small proportion of that noble and ancient tribe, but as usual these prostitutes keep up their number by adoption. In Patna several of the prostitute families are rich, and a few in Behar have trifling endowments in land; but in general they are rather poor. They are not however as in Europe neglected, when they become old, their adopted daughters supporting the aged; nor do they acquire the hardened depravity, that arises from a sense of being totally despised and unprotected.* The women of Patna and Gaya have farther the character of

* The same occurs in France, Italy, &c.—[Ed.]

being much given to intrigue; and it is alleged, that until of late many of the merchants and traders of the former place were very willing to profit by a connivance. It is said however, that of late they are becoming more scrupulous. At Gaya the women of the Brahmans are those chiefly accused, and the extreme dissipation and fickleness of their husbands is pleaded as an excuse. In every part of the district the women, who retail greens and fish, are considered as frail; and it is supposed, that no woman, who goes so much into public as these do, can remain virtuous; and there is some reason to suspect, where the rules of decorum established in any country are once violated, although these rules may be quite absurd, that the violators will often proceed to criminal lengths. With the above mentioned exceptions, the women of these districts have a very fair character.

The people of these districts are upon the whole much more industrious than those of Bhagalpur. In the south-east corner indeed there is a great remnant of sloth, but in the other parts, so far as their skill goes, the people make as much exertion as in most countries. In other respects their character is nearly the same as in Bhagalpur, only that the vile custom of beggarly complaint is not known. I found the people extremely civil; nor was I ever in any difficulty for supplies; but they were very jealous of my enquiries, and the farther west I proceed, I find the more difficulty in procuring satisfactory information. A good deal of this, I believe, proceeds more from stupidity than design; for they want the acuteness and knowledge of the Bengalese, and are equally afraid of every question; while the greatest knave in Bengal knows the points, which are likely to effect his interests, and on all others will give you satisfaction. The wealthy Muhammedans here, as elsewhere, occasionally visit and dine with each other; and one of them visits and entertains Europeans. The Hindus, except at marriages, and feasts given for the restoration of caste, or such ceremonies, seldom entertain their neighbours, or even visit them, unless on business. If a stranger comes, he is not at all introduced to the family; but is lodged in an outer apartment, where the landlord receives him with numerous ceremonies, and gives him food.

ON THE EDUCATION OF THE PEOPLE.—Those who instruct children to read and write the Hindi character, as well as the spiritual guides are here called sages (*gurus*). There

are no public schools, and no Guru teaches, who is not a servant to some wealthy man; but in general they are allowed to instruct the children of some neighbours, and a hut is built, for a school-house without the village, least the Guru should have too frequent opportunities of seeing the women. These school-houses are called Pindas, a name applicable to several things considered sacred. In parts of the country, where sugar-cane grows, the boiling house ususally serves for a school. The profit of the teachers is as usual very small. Many children are taught by their parents.

In the whole of these districts the Hindu dialect is the one universally spoken; but there are many differences in phrases and pronunciation, and some tribes, especially the aboriginal Musahar, Rajwar and Bhungihar, are not fully understood by those, who have not made themselves acquainted with their dialect. This however, is a mere variety of the Hindu language; but it is spoken with a very different accent, and contains many more words of the aboriginal languages, that are not derived from the Sangskrita. I have already said, that in this country the Kol or Chero are supposed to have been at one time the governing tribe, and then no doubt the prevailing colloquial language would be that, which they still speak, and which has no sort of affinity with the Hindi; but as the princes of the Kol would appear to have been Asurs, being of the same family with Jarasandha, it is probable, that in writing at least they used the Hindi language, which is a corruption of that introduced from Iran by the first conquerors of India, and like the other languages prevailing in India has been variously modified from a common source in grammar and accent, and variously altered by numerous words introduced, according to the different nature of the dialects originally spoken in the various parts of the country, where it is now used.

The Kol language is probably one of the original rude languages called Magadhi by some grammarians; although this term was probably also applied to the dialects of the Bhungihar, Musahar, Rajwar, &c. It is probable, as I have said in the account of Bhagalpur, that the language of the Bhungihar resembled that of the mountaineers of Rajmahal. What language was used by the Musahar and Rajwar, undoubted aboriginal tribes of Magadha, I cannot learn. It probably however resembled that of the Bhungihar, as the

Kol would appear to have been strangers from the northern part of the peninsula. The Kol language was probably never written; and I have supposed, that it was during the government of this tribe, that Gautama was born, which will perhaps account for the assertion of the priests of Ceylon, who according to Captain Mahony allege, that in the time of Gautama writing was unknown. If Gautama was the inventor of Hindu metaphysics, as usually supposed, this could not strictly speaking have been the case, and those called philosophers or priests, must have had a written character, which was held sacred from the vulgar. If any of the writings of Gautama remain, they may probably be considered as the most ancient extant form of the sacred language of India, as they evidently must have preceded the Vedas, in which they are quoted. The Vedas indeed seem to have for their chief object an exposition of the worship of the heavenly bodies and fire, a doctrine first probably introduced in India by the conquests of Darius, which happened shortly after the time of Gautama. It is to be remarked, that among the numerous inscriptions found in this district, I have only observed one, that has any sort of resemblance to the Pali character, in which the writings of the sect of Gautama in Ceylon and Ava are now extant; and that one, from its rounded form like the common character of Ava, is probably very modern. The inscriptions so usual near the residences of the Bharadratas, of the Magas, and of the Kols, so nearly resemble the Devanagri, as to be easily read by those who knew that character, and this is the only part of India, where I have yet been, in which that character seems to have been in early use. Never having found old Devanagri inscriptions, until I came here, I was at one time induced to suppose, that this character was a modern invention; but I now am persuaded, that in the central parts of Hindostan, at least, it is of considerable antiquity, although its forms have undergone various modifications, even since the Muhammedan conquest. Although therefore the writings of Gautama may have been composed in the sacred language of Magadha, the character called Pali has probably been that of the people, from whom the doctrines of this lawgiver passed to Ava and Ceylon; and, if Major Wilford is right in placing Palibothra at the ancient junction of the Kosi and Ganges north from Rajmahal, we shall find, that this character is that of the Pali, the aboriginal inhabitants of Matsya

or Dinajpur, and the time, when this nation (*the Gangarides of the Greeks*) governed, will point out the real period, when the doctrines of Gautama were transmitted to Ceylon and Ava. I here must remark, that the Magadhi jargon above mentioned, as spoken by the Kol, &c. must not be confounded with a language called Prakrita or Magadhi Bhasha, in which many of the books of the sect of Jain are written. This from some words, which I have heard, seems to be a dialect of Sangskrita, and is probably the same with the Prakrita of Rawana Lord of Langka. It is written in the Devanagri character, and I suspect is the form of the Sangskrita language, that was used in the time of Mahavira and Gautama, that is in the 6th century before the birth of Christ, and will probably be found the same with the sacred language of Ava and Ceylon, although that is now written in a different character.

The observations that I made on the use of the Hindi dialect in my account of Bhagalpur, are perfectly applicable to this district. The Bhats, or poets of this district are said, however, to have some poems in the Des-bhasha, or language that is intelligible to every one. With these poems the Bhats store their memory, and by changing a few words, and quoting such passages as are applicable to the occasion, have the appearance of bestowing extemporaneous praise or censure on those whom by such means they attempt to fleece. In this dialect there are extant many songs, which are sung chiefly by the women at marriages, and relate as usual to religion and love. They are mostly composed by the Mirasin, or by Khatrani prostitutes, and are sung by all ranks; but the higher castes sing them only in private, while the lower tribes sing them as they walk in procession: none of them, so far as I can learn, have been committed to writing.

In the higher kind of Bhasha, which is understood by few, the only composition at all common is the Ramayan of Tulasidas; but the other books mentioned in the account of Bhagalpur are here also occasionally used, as are also some others, such as the Jaimini Bharat, and the Ramchandrika Rasapriya, and Satsayi-Doha of Kesav Das. Even in Patna, where the works of Tulasidas are better understood than in any other part of these districts, the people of rank assemble to hear a man called a Pandit, who can read distinctly, and

receives a trifle from each; not above 10 or 12 persons in any assembly understand the reader, and therefore some one of these explains the meaning of each sentence, after which the flock are told the name of some god, which they bawl out until they are out of breath. In some places I heard it alleged, that many diligently read Tulasidas who could not read any other book, nor even a letter on any common subject; and there is great reason to suspect that these people have committed the poem, or at least parts of it, to memory, by frequently having heard it read or repeated, and that they merely look on the book for the sake of form, as the act of reading is considered meritorious. A few persons of high rank understand Tulasidas, yet cannot read. In Patna Gaya and Behar, a few of the women of the Brahman, Khatri and Kayastha tribes can read and write; but, I believe, they have mostly come from the west of India. No one of these districts, so far as I can learn, has studied the Prakrita, which is supposed to have been the language of Rawana. The study of Persian literature is here much on the same footing as in Puraniya and Bhagalpur; but this language is more used in revenue accompts. The teachers are here called Mianjius and Khulifahs. The Persian character is not used here to write the Hindustani language, which, so far as I could learn, is entirely colloquial.

The course of Persian learning that is usually considered as complete, I am told, is as follows: after learning the alphabet, the pupils read the Khalukbari, a vocabulary, then the Pundnamah and Amud-namah, and Mukhtur-ali-Baharat, and Golestan, and Bostan, and Jameolkawanin, and Rokkat-amanullah Hoseyni, and Bahardanesh, Abul-Fazul, and Sekundurnamah. Very few indeed go through such a course. By far the greater part of the Moslems content themselves with being able to read the character and to sign their name, and at the same time commit to memory some prayers in the Arabic tongue. Many Hindus are taught to read and write the Persian character before they begin Hindi, and the greater part of them proceed little farther than to be able to understand and write a revenue accompt, and are not able either to fully understand or to indite a letter; this is an accomplishment which entitles a man to be called a Moonshee. The chief Hindu Zemindar can read both Persian and Hindi,

and is a very shrewd man; but has confined his studies chiefly to mere forms of business; the other great proprietors are chiefly Muhammedans; but by far the greater part of the landholders consists of mere peasants, one half of whom cannot read; but the chief of each family generally acquires the art of being able to make a mark, resembling the characters which compose his name. People, who can sign their name, and guess at the meaning of an account, are here called Katakshars and Hurf-shenas.

The people fit themselves as well for the transaction of ordinary business as those of Puraniya, although there is less encouragement; for the subdivision of property is so great, that in collecting the rents very few persons are employed who have a rank higher than a village clerk (*patwari*). The officers of police and commissioners for deciding petty suits are in general respectable well informed persons, and are mostly natives of these districts; but on the whole chicane and stupidity are very nearly as prevalent as in Bhagalpur.

In the Appendix will be found the result of my enquiries respecting the state of common education in these districts, and the number of schoolmasters and teachers. In these districts I heard of seven Moulavis, who instruct youth in the higher branches of Persian literature, and in Arabic science; but I suspect that both are very much neglected. The Nawabs of Bengal established a Mudursah at Patna, and the Moulavi occasionally resides; but is often absent, and I suspect merely makes a form of teaching. The three Moulavis of Phulwari in Bakipur division have more reputation; yet the Darogah of police knew the name of only one of them, Zaherulhuk, who has eight or ten pupils. Nyamutullah, however, I learned, has about 20 pupils. No one, whom I consulted, knew the name of the third. Sayefullah of Sahebgunj teaches four or five pupils. Ahamudali and Kumalulhuk of Bar have each a few pupils. These have all endowments. There are besides a good many persons who have acquired the title of Moulavi; but they do not teach, and some of them are probably rather shallow; but among them are some who have a high reputation; and Ahub Kasem, a native of Persia, now residing in Patna, seems on several subjects to have made himself acquainted with the opinions of both Europeans and Hindus.

The Kazis of these districts are less respectable in their manners, and I believe worse informed, than those of any of the districts hitherto surveyed. Many as usual read the Koran without understanding Arabic. With regard to the three higher sciences of the Hindus, grammar, law, and metaphysics, the Pandit of the survey in the course of his enquiries heard of 56 teachers. In a statistical table (Appendix) is given a list of these philosophers, and to this I refer for many particulars. According to the Pandit, Kasinath and Ramnath, two brothers of Jahanabad, Saryu Giri of Buddha-Gaya, Ekmani Pathak of Duriyapur, Krishnachandra Upadhyay of Bar, Bhupati Pathak of Gaya, Prabhakar Misra of Vikram, and Jagannath Misra Bhagawanta and Mahananda Pathak of Patna, are men of considerable learning in their respective professions. It must be observed, that by far the greatest part are of the colony from Sakadwip, who have always remained in Magadha, and retain the name of the original country of the sacred order, and that the others are of very various countries, both in the southern and northern divisions of the colony, that settled in Kanoj, and was from thence spread over India. They have all endowments; but none of these are considerable, and in general they are very trifling, on which account many of the professors cannot afford to feed their pupils, most of whom therefore are neighbours' sons. Here the professors are not called Adhyapaks, nor are their schools called Chauvaris. They merely take the title of Pandit; but this is given to a great many other persons, some of whom have little pretension to learning. Their schools are called Dharmasalas, but this name also is bestowed on other places, the haunts of religious mendicants, or the conventicles of the sect of Nanak. Those who teach grammar or Vyakaran are called Sabdikas, as is usual also in Bengal, and it will be observed from the list, that this is the chief study followed. The books chiefly studied are the Saraswat Chandrika, and Siddhanta Kaumudi, which have been formerly mentioned. Besides these, however, some attention is paid to the Bhatti mentioned in my account of Dinajpur, to the two poems of Kalidas, called Raghu and Kumar, mentioned in the same account, and to the Naishadha, and Magh. The former gives an account of Nala Raja and Damayanti his wife, and

is supposed to have been composed by Sri Harsha, a Brahman of the degenerate age, who is thought to have lived after Kalidas. The poem is of an amatory nature. The Magh is a composition of a Raja, who also lived in this degenerate age, but where, nor when, I have not learned. The work seems to be composed of various legends taken from the Mahabharat and Shribhagwat, and wrought up into a new work.

Those who study law or the Dharmasastra are here called Smarta, a name which in the south of India is exclusively assumed by the followers of Sangkara. The books, which they chiefly study, are supposed to have been composed by Yaggnabalkya, a Muni, and the Mitakshara published by a mere man. The former is supposed to have lived in the second or silver age of the world (Tretayug), and is one of twenty lawgivers (Manus) who are supposed by the orthodox Hindus to have composed codes, namely, Menu or Swayambhuva, Atri, Vishnu, Harita, Yaggnabalkya, Usana, Aggira, Yama, Apastamba, Sambarta, Kartyayana, Brihaspati, Parasara, Vyasa, Sangkha, Likita, Daksha, Gautama, Satatapa, and Vasishtha. Of these it must be observed, that Vishnu, Yama, Brihaspati, and Gautama, have obtained divine honours, and that a family, which long governed India under the title of the descendants of the moon, was descended from Atri. I am told, that in the works attributed to Menu, Yaggnabalkya, and Vyasa, these twenty persons are always mentioned in the same order, and it may be thence inferred, that this was the actual order in which these persons appeared. If this is the case, many of my readers will infer, that the works attributed to these personages were composed in later ages, as Vyas undoubtedly lived long after Manu (Swayambhuva) and Yaggnabalkya, and as Gautama is mentioned in the works attributed to Vyasa. The Hindus have however another explanation, and rely on the strength of prophecy in a manner which it will be found difficult to overcome. The Mitakshara of Padmanabh Swami is a commentary on the works of Yaggnabalkya, which is said to be very intelligible. Besides these, some attention is also paid to the Nirnaya Sindhu, and Nirnayamrita, both composed by Halayudha a Pandit; and to the Prayaschitta Kadambha, that points out the ceremonies, by which different sins may

be removed. Metaphysics are very much neglected, and are taught by only one Pandit.

The Maharashtra Brahmans of Gaya have studied somewhat the meaning of the Vedas, but have no pupils; for here, as well as in Bengal, the people in a great measure neglect these works, farther than to read certain portions of them in their ceremonies; but with their meaning, or the controversies that have arisen on this subject, they give themselves no sort of trouble. The Purans are a more favourite study, but the Sribhagwat and the Bhagawatgita of the Mahabharat are almost the only parts to which any attention is paid; these are read and the meaning explained. This, I am told by all the Pandits, is an exceeding difficult matter, the true meaning being very much involved in mystery, and of course has given rise to numerous controversies. Five great doctors, Sridhara, Sangkara, Toshani, Sandarbha and Nilakantha, have with many others treated on the subject in books called Tipani, or explanations, and these have given rise to different schools. In this district the first is chiefly followed. He is said to have been a (Dandi) Brahman, who relinquished all the pleasures of the world, and assumed three different names in the three great works which he composed. As author of a commentary on the Sri Bhagwat, he is called Sridhara, as author of the Mugdhabodha grammar he is called Vopadeva, and as author of a commentary on the Kalapa grammar, he is called Durga Singha. He is supposed to have lived in the 15th or 16th centuries of the Christian era. I have already mentioned that Mr. Colebrooke supposes this person to be the real author of the Bhagwat, and he probably in this follows the assertion of some of the sect of Sakti, who allege that Vopadeva in the Mugdhabodha, states himself as the author of the book in question; but the sect of Vishnu deny this explanation, and insist that Vopadeva here merely alludes to the commentary which he wrote under the name of Sridhara, and that the explanation given by the sect of Sakti was invented by Krishnachandra, Raja of Nadiya, who wished to have the Devi-Puran considered as one of the 18 chief works of Vyasa, and as the true Bhagwat. The only other part of what can be called divinity, although it may more properly perhaps be called magic, is the science of Agam, or of the Tantras, and in these dis-

tricts is very little studied. It is taught only by one person, Saryugiri of Buddha-Gaya, whom I have formerly had occasion to mention. He instructs his pupils chiefly in the Syamarahasya and Tararahasya, both belonging to the Virbhav, or that form of worship which is accompanied by drinking spirits, eating flesh, fish and parched grain, and copulation. It seems very strange that such impure indulgences should be taught by a man, who, from being of the order of Sannyasis, should have abandoned the sex and all worldly enjoyment. Many of the order are no doubt frail; but I certainly should have expected that the only man of learning that I have met belonging to it, would have abstained from the profession of openly teaching doctrines apparently so directly opposite to its rules. He also teaches the Tantrapradip, which explains the doctrines of both the Pasubhav and Virbhav.

Astrology (Jyotish) is more pursued and taught than the Tantras, but no great progress has been made, and I heard of only one man who can construct an almanac. Those in use here come from Benaras and Tirahut. The books chiefly read are the Muhurta-chintamani and Sighrabodha; the Swarodaya and Surya-Siddhanta are occasionally but rarely consulted. It must be observed that some of the Pandits here teach astrology alone, and contrary to the custom of Bengal are considered as high in rank as the grammarians.

Medicine (Baidya-sastra) is taught by several of the Pandits, some of whom also, although they are grammarians, practice the art. The books on medicine chiefly studied in these districts, are the Saranggadhar, Babhat and Chakradatta. Saranggadhar was the son of Damodar, a Brahman; but when or where he lived I cannot learn. Babhat and Chakradatta are also the names of the authors, but the people know nothing of their history. Among the Muhammedans, the practitioners of medicine, who study Arabic, are usually called Yurani, as the science of medicine was introduced among the Arabs by bad translations of the Greek authors, which are still much studied. A small part only of the practitioners understand Arabic, and the greater part of them content themselves with translations of Arabian authors into the Persian language, and many, I suspect, understand very

little of even these. They are in general educated as private pupils, attaching themselves to some practitioner; but Moulavi Mosafer, who was formerly Mofti of the court of appeal, teaches medicine to several pupils, although he professes all other branches of Arabic science, and is not a practical physician. To these learned persons must be added Udawanta, of Behar, a priest (Yati) of the Jain, who is versed in grammar and the books of his sect, and has instructed one pupil.

Besides these, there are in the district about 1200 persons called Pandits, who act as Gurus, or Purohits for the high castes, as indeed the professors do. Some few of them are learned men; but in general they have a small knowledge only of grammar, law and astrology, and a little of the former is all that is absolutely necessary to acquire the title. None of the Rajputs, Khatris, Kayasthas, nor other Sudras have studied any kind of science, nor is it considered lawful to allow a person of the profane tribes to read any work composed by the Gods, or Munis. The sacred order has preserved to itself the entire profits of astrology, and the other valuable arts which compose Jyotish (astrology). Besides the professors, many of the Pandits practise this art. There are many of those called Purohit Brahmans, who, like the Dasakarmas of Mithila, are quite illiterate, and therefore perform the ceremonies without understanding what they read or repeat; but they disdain to officiate for any but the high ranks. These have made such progress in Jyotish, as to know lucky and unlucky days. The lower orders are instructed in these by some persons called Jausis, who are chiefly of a colony from Kraungchadwip, and like the Purohits can explain an almanac, although they do not understand Sangskrita.

The era used in this district is called Sambat, but that word merely implies era, or rather juncture. The Pandits, however, consider their era as that of Vikrama. The year of Sambat, 1869, began on the first day of the waning moon in the lunar month (phalgun), which was on the 28th of February, A.D. 1812. The year consists of 12 lunar months; but after every 30 lunations an intercalary month is added, and called Malamas. This year is used every where by the Hindus in their ceremonies, but is here also used in civil

affairs, which is attended with some inconvenience, as in different years the same months happen at somewhat different seasons.

Besides the professors of medicine, about 700 families of Brahmans, almost all of Sakadwip, practice that art, and are the only Hindu physicians who possess any thing like science, except three of the medical tribe from Bengal, who have settled at Patna, and about 60 Muhammedans chiefly at Patna and Daudnagar. Two of the practitioners here are servants, there being many large towns. It is only in a few places that there are any of those who practise medicine without some sort of learning, and without books. In the whole of the two districts there may be of such 30 or 40 families, mostly in the town of Patna, where they are called Atai-Baidyas, or pretended doctors. There are about 150 Jurrahs, or surgeon-barbers, who cup, bleed, and treat sores. The midwives are of the lowest tribes, and merely cut the umbilical chord. The low people, called Ajha, who cast out devils, cure the bites of serpents, and oppose witchcraft by incantation, are not so numerous in proportion to the population as towards the east; but still there are a vast number, and in general each confines himself to one branch of the profession. About 2,500 pretend to cure the bites of serpents, and 2,300 pretend to oppose the devil and witches. Some of these pretend that they themselves are occasionally possessed, having taken to themselves the devils that they have cast out from their patients. The Bhakats, being holy, are unfit habitations for the devils, who therefore soon afterwards go somewhere else in search of better accommodation. The Ajhas do not attempt to cure any disease except such as are attributed to devils and witches. On these two subjects the belief is in general pretty much the same as in Bhagalpur; but on the point of devils, through the influence of a Moslem saint, I found the people of Helsa more sceptical than any with whom I have yet met.

Inoculation for the small-pox is here carried on by a class of people called Gotpachcha, or Pachaniya, who are not included among the Ojhas, although they in no respect differ in their practice from those of the districts hitherto surveyed. They are mostly of the Mali tribe, or of some other low caste, although to Europeans they often assume the title of Brah-

mans. I have heard that some Europeans have been silly enough to employ them to repeat their spells, even when an European surgeon had performed the operation. Not above 15 or 16 families reside in these districts, and those employed come chiefly from Tirahut.

Religion and Sects.—Calculating in the same manner as I did in Dinajpur, I reckon the Muhammedan population at about 27 per cent. of the whole, or at about 924,000 persons. In the Appendix will be found the result of the calculation for each division, and also the various proportions of Muhammedans and Hindus in different parts of the district. It must be observed that many, both Hindus and Moslems in these districts, are called Muleks, and are said to be descended from the persons who accompanied Ebrahim Mulek Bayo when he first subdued the country.

Muhammedans.—Converts are occasionally made from the pagans, especially by the purchase of slaves, who are treated with great kindness, as I have before mentioned; but this operation is now going on much more slowly than formerly, when the Moslems possessed the government, and an enormous income, a great part of which was dissipated on the means of propagating their faith. Still however there is reason to think, that within these 20 years a considerable increase in the number of the faithful has taken place. By the mere exertions of Fakirs or other religious persons, very little has been, or can be done; but by the simple operations of purchase and procreation, any religion might in a reasonable time be extended, and that without giving offence, a very large proportion of the natives being considered by the spiritual guides now in the country, as not worth the admission into their flocks. I do not think, that in a temporal view this conversion would be attended with any advantage; and whether or not in a spiritual sense it could be done with propriety, I cannot pretend to determine. The plan however succeeded perfectly with the Muhammedans, and, as far as I can learn, perhaps a half of all the faithful in these districts are descended of Hindu fathers; while a very large proportion, of even the highest ranks of Saiuds, Moguls and Pathans, have had a frequent intermixture of Hindu blood in the female line. So far from having any objection to this mode of propagating religion, Raja Mitrajit, a Brahman,

having had a son by a Muhammedan woman, has bred him up in that faith, and will probably leave him the larger part of his great estates. If any one may be surprised at this, and ask, why a Brahman did not lose caste by such an action, I reply, that a man, who has Raja Mitrajit's power, cannot lose caste: the Brahmans are too complaisant to commit such an outrage. Whether these conversions were of any use to the Muhammedan government seems very doubtful. In fact, whenever the kings abstained from persecution, they had nothing to apprehend from the religion of the Hindus, and it will be found, that the disturbances, which ensued so very incessantly during the Muhammedan government, chiefly arose from their own internal dissensions, and national disputes. In that respect they were always weak, nor would it appear, that either the Persians, Moguls or Pathans had ever the precaution of employing regular corps of their countrymen as a defence for their government. Each prince indeed favoured his countrymen, but it was in bestowing on them favours and high appointments, which rather excited envy than afforded the means of supporting authority. Besides, therefore, the total abstinence from persecution, the British Government, in a powerful body of corps entirely European, and totally distinguished from the natives by colour, language and habits, possesses a solidity and strength much superior to that of any of the Muhammedan dynasties. Some christians seem to think, that the doctrine of Muhammed is preferable to that of the Pagans, and perhaps it may in some senses be so, as being infinitely freer from superstition, and as being somewhat less destructive of the human faculties; but I doubt much, whether such conversions, as have been made by the Muhammedans among the Hindus, have been in either respect advantageous to the proselytes. They call indeed upon Allah, and the prophet; but still I doubt much, if they have been weaned from any of their former superstitions. The higher ranks of Moslems here in general abstain from making offerings to the pagan gods, but the multitude in all distresses have recourse to the idols, and even make offerings at many holydays. It is on the contrary the higher ranks of Hindus, that are chiefly addicted to send offerings to the saints. The worship of Satya-Pir is here totally unknown.

The observations that I have made on the office of Kazi,

in my account of Bhagalphur, are in a great measure applicable to these districts, only that the selection of men to perform the duties has been made here with very little care. In very few places are there any persons called Mollas. None such are appointed by the people independent of the Kazis, and those whom the Kazis appoint are almost every where called Nekah knanis or Nayebs. They have no authority to act as notaries, but marry the lower classes. The higher classes procure Pirzadahs, or any person of their own family who can read, to perform all their ceremonies. The poor, if they can, procure some man, who can read the koran, to assist at their funerals, or in the time of mourning; but the common performers on such occasions are a low class of mendicant musicians called Daphalis, who have committed to memory some portions of the sacred book. Circumcision of boys born in the faith is not accompanied by any religious ceremony, which is only used, when a convert is circumcised. In these districts the Pirzadahs, who make Murids, seem to have very great influence; and many of them, as I have said in my account of the various jurisdictions, when treating of the topography, affect an extraordinary zeal; insomuch, that they will not come out of their houses, lest they should be shocked with the view of idolatrous practices, which they cannot prevent. Others avoid all intercourse with infidels, and others, who are too poor to give themselves these airs, affect great mortification and austerity of morals, and much humility even towards unbelievers. There are among them however some rational, polite, well-informed men.

All religious mendicants are here called Fakirs and Padris; but I shall as formerly confine the term Fakir to those who adopt the faith in Muhammed. The number of Fakirs here, exclusive of the Pirzadahs, who in fact belong to the order, when compared with the amount of population, is very trifling, and does not exceed 1200 houses, nor is the number of vagrants so great as in Bhagalpur. Here the vagrants are chiefly pilgrims, and have a fixed abode in other districts, to which after their travels they will return; and many of the Fakirs belonging to this district are absent on the same account. Perhaps one half of the Fakirs of these districts have more or less land annexed to some tomb or monument where they reside. These are called Tukiyahdars, and some

few of these (perhaps 160 or 170) do not marry; but are succeeded by their disciples (Chelas), and are often known by the Hindu title of Yati. On the whole the provision for this class of men has always been very scanty. Among the unmarried are some men, called Kulundur, who are notorious drunkards, and keep tame bears and monkeys, which they show, as they wander about begging. The order of Fakir does not seem increasing, and most of the married families have long enjoyed the title. In the town of Patna most of the Fakirs are of the orders of Arzanshahi, Imamshahi, and Saharwordiya, who do not marry. In the country most are married, and are of various orders. Prayer, and the sort of ablution, which the law of Muhammed prescribes, and which by no means contributes to personal cleanliness, are more generally in fashion in these districts than towards the east, and perhaps 1000 people in this respect obey the injunctions of the prophet at the five regular periods, while a considerable number pray at least once a day. I heard of 15 persons, men and women, who have been on pilgrimage at Mecca. Not above 1500 persons leave these districts annually to visit the tombs of saints; but many go from one division to another, to visit the monuments of the numerous saints who are celebrated in their vicinity. These pilgrims, who thus leave their homes for some days, may annually amount to 7000 persons.

I have heard of three persons of the kind called Hafez, who have committed the whole Koran to memory, and who do not understand a word of it. None, who understand this production, give themselves so much trouble. Many remember portions, and many more read the book, but only Moulavis understand it, and the number of these is quite trifling; nor is there any one who explains its meaning to the multitude. In two or three mosques at Patna, every Friday, a few assemble at noon, and an Imam reads a portion of the Koran, which the congregation repeats after him. The largest congregation consists of 40 or 50 people of the Sheya sect. Next to these in number is an assembly of Kashmirians of 20 or 25 people. The others are very trifling. The only public worship usual in these districts is on the two days called Id and Bukurid, on which perhaps one quarter of the Moslems, chiefly of the higher ranks,

assemble at some mosque, monument or Idgah, and read the Koran as before mentioned, and some forms of prayer (*Doya*).

In Patna perhaps one-half of the Moslems fast more or less during the Ramazan; and in the country about one-fourth may do the same; but few fast every day through the month; and none, except such as are strong, attempt any such penance, which, as it requires a total abstinence from drink, in a burning climate, from sun rise to sun set, is very severe, and would especially be intolerable for the labouring class. Almost all the lower ranks are addicted to spirituous liquors, and in the country many even of high rank are not ashamed to drink palm wine; but in Patna this must be done in private. The Mohurrum is as usually celebrated with intolerable tumult, but free from violence. The pageants (*Taziahs*) are not near so large as in Bengal, but are very numerous; as it is said, that almost 14000 are annually exhibited, of which perhaps 600 are however made by Hindus, who seem to enjoy the tumult just as much as the Moslems. These pageants are seldom thrown away as in Bengal, but are carefully preserved from year to year. Before the procession, however, they are annually repaired and trimmed. The Shiyas form a very inconsiderable part of the population, and are under 3000 families, mostly of rank, and chiefly confined to Patna, Sahebgunj, and Sheykhpurah. Every Mohurrum formerly there used to be a dispute between them and the Sunnis, which always ended in blows, and often in murder. For eight or nine years this has been stopt, the magistrate having received orders from government. All decent people are much satisfied with this interference, and I believe even the lower classes are not discontented at being prevented from fighting; although, if it were not for the orders of government, they would hold themselves bound in conscience to squabble as formerly.

The practice of caste is here very much extended among the Moslems; and although all men of sense among them deny the doctrine, none of them, except three persons of rank at Patna, will eat with infidels, and many tribes are excluded from mutual marriages, and are in a great measure condemned to perpetual exclusion from rank and respectability. The Saiuds include only the descendants of the pro-

phet, and are reckoned the highest rank. They will not give their daughters in marriage to Moguls. There may be in the whole 13,500 families of this tribe. Next in rank to the Saiuds are the tribe of Koresh, the Faruki descended of Omur, the Siddiki descended of Abubukur, the Osmani descended of Osman, and the Furidi descended of a saint of that name. All these constitute the proper Sheykhs, and are Ashraf; but every low fellow assumes this title, although on that account he is not admitted to any rank. The number of these pure Sheykhs is very inconsiderable.

The Moguls and Pathans, who lately governed India, are beginning to fall into contempt, especially the former, who seem to be a mild polished people; but the Pathans are a ferocious tribe, and a good deal feared. The Moguls besides are very few in number, and do not probably exceed 600 families, one half of whom reside in Sheykhpurah, and three quarters of the remainder in Patna.

Of the Pathans there are above 6000 families, chiefly settled in Nawada, Sheykhpurah and Patna. Many of them are now reduced to use the plough, which is considered by them as less disgraceful than being artizans. Rajputs, when converted, were admitted by the Pathans as having nearly the same ferocity of manners with themselves. This, however, seems to have been in favour of the Mayi family, which before its conversion was of the Rajput tribe. The labouring classes assume, as I have said, the title of Sheykh; and, although they are ranked far below those of Arabian extraction, their claim to this title seems generally admitted. Those who cultivate the land, if rich, sometimes eat and intermarry with poor Moguls and Pathans. The converted tradesmen, although also called Sheykhs, adhere to the doctrine of caste in full vigour; and although looked upon as low, would not accept of intercourse with the higher ranks were it proffered. The following tribes are on this account excluded from communion.

1. *Jolahs*, or weavers, 17,700 families. 2. Tape-weavers and knitters of strings *(patwars)*, 270 families. 3. Tailors *(darji)*, 1,200 families. 4. Glass-workers *(churisaz)*, 320 families. 5. Mendicant musicians, *(daphalis)*, 360 families; these often eat and intermarry with tailors, tape-makers, and glass-blowers, being in fact persons of these three tribes that

follow this profession. 6. Musicians who perform at marriages (*dhari mirasin*), 120 families: in the west of India these are called Domna Domni. 7. Musicians who perform at births (*pawangriyas*), 80 houses. 8. Prostitutes (*kangchani*), 800 houses. 9. Poets (*bhat*), 56 families. 10. Jesters (*bhangr*), 4 houses. 11. Ballad-singers (*kalawangt*), 70 families. 12. Retailers of fish and vegetables (*kungjra*), 2000 families. 13. Innkeepers (*bhathiyaras*), 350 families. 14. Distillers of spirituous liquors (*kulal*), 2,300 families. 15. Sellers of intoxicating drugs (*bhanggera*), 3 families. 16. Confectioners (*halwai*), 2 families. 17. Bakers (*nanwai*), 80 families. 18. Mutton butchers (*chik*), 400 families. 19. Beef butchers (*kussab*), 450 families. 20. Barbers (*hujam*), 450 families. 21. Washermen (*dhobis*), 250 families. 22. Bird-catchers (*mirshekars*), 130 families. 23. Oil-makers (*teli*), 8 families. 24. Potters (*kumbhar*), 2 families. 25. Tinmen (*kalaigur*), 11 houses. 26. Tobacco-pipe-makers (*naychahbund*), 20 houses excluded, but many follow the business without disgrace. 27. Shoe-makers (*muchi*), 60 families. 28. Farriers (*nalbund*), 12 families. 29. Bow and arrow makers are of different trades, but are of the same caste, 40 families. 30. Paper-makers, 110 families. 31. Cutlers (*sikulgurs*), 200 families. 32. Cotton cleaners (*dhuniyas*), 2,100 families. 33. Dyers (*rungrez*), 700 families. The same people make soap. 34. Carpet-weavers (*kalinbaf*) 70 families. 35. Gardeners (*mali*), 3 houses. 36. Water-carriers (*sukkah*), 70 families. Many weavers follow this profession, but do not intermarry with the sukkahs. 37. Sweepers and scavengers (*khakrob*), 200 houses. 38. Slaves (*molazadah*), 2,850 families.

The Hindus.—The account usually given in the books of the Brahmans is, that the Hindus are divided into four castes, Brahman, Kshatri, Vaisya, and Sudra, and that at the creation of man by Brahma these castes issued from four different parts of his body, typical of the offices which each was intended to perform. In the Jatimala of the Rudrayamal it is mentioned, that many of each caste, male and female, thus issued from the body of Brahma. In the Sribhagwat again the four castes issued of Brahma are mentioned in the singular number, and it might be from thence inferred that only one Brahman, one Kshatri, one Vaisya, and one Sudra are sup-

posed to have been created; but this, I am told, is not a tenable opinion, because in the Purans there are allowed to have proceeded from Brahma at one time five Brahmans, usually called Siddhas; at another 10, usually, however, called the seven Rishis; and then another set called the Dakshyadi, from one of their names with *adi*, i. e. &c. annexed. The singular number, therefore, is only used, because applied to many persons in one collective sense, a form of construction very familiar to the English.

The number of castes at this day is very great, and in the earliest accounts of the natives of India, which we have in the Greek and Roman authors, the number of tribes mentioned far exceed four. According to the sect of Magi (*Agam*), as explained in the Rudrayamal, this is accounted for by alleging that numerous other castes have arisen from the illegal intermixture of the four original tribes; but here a great difficulty arises. Vyas is universally allowed to have been a pure Brahman, yet his mother was the daughter of a fisherman of the low Kaibarta tribe; and at this time, although the customs concerning such spurious offspring differ a good deal in different parts, such intermixtures do not anywhere produce new castes. In many places they form a spurious breed, adhering to the father's tribe, and called by the same name. In others they are considered as belonging to the mother's tribe; and, as the father is usually of the more honourable caste, they are considered as higher than ordinary. In some places, again, they are abandoned as totally vile, no one will have any connection with them, and therefore they become Muhammedans, or Christians, where there are any missionaries. But further, I would allege that the existence of the doctrine of caste in very ancient times is totally contradicted by such historical traces as are to be found in the Purans. Two families of princes seem to have governed India from the earliest times, and each branched out into numerous lines that shared the country between them; while sometimes the one and sometimes the other was most powerful, and furnished the prince who was considered as the paramount Lord of India. It might have been expected, from the common account given of the origin of castes, that these families named after the sun and moon, as descended from two persons who bore these names, would in the Purans have been traced

to the regal tribe (*kshatriya*), which issued from the arms of Brahma, but this is far from being the case. They are traced to Marichi and Atri, two of the Brahmans who were created by Brahma. Again, Viswamitra, according to Valmika, was a celebrated king of the golden age, and is universally allowed to have been a Kshatri; but he became a Brahman, and left 100 sons, one half of whom were infidels (*mlechchhas*), and of the remainder some were Brahmans, some Kshatris. Among the former was Mudgal, from whom many Brahmans now claim a descent. Still further, the god Parasurama, acknowledged by all to have been a Brahman, was son of Yamadagni, whose mother was a sister of the above-mentioned Viswamitra. From all this I infer, that originally the title Brahman was not hereditary, and that the division of the people into four tribes or castes, perpetually barred from intermarriage, took its rise in some other country, and was from thence introduced to India, long after the two great Indian families had begun to govern the country. As I have formerly said, I consider Egypt as the most probable country from whence this doctrine of four castes could have been introduced, because, in fact, it is the only country, so far as I know, where in remote times such a doctrine prevailed. The Egyptian colony consisted entirely of Brahmans, and, as they established their doctrine of caste, they gave the rank of Kshatri, Vaisya, or Sudra, to each tribe or profession that adopted their law, according to its local power or to the strictness with which it followed the rules of purity, an operation which I have had occasion to show, has been going on in very modern times, and has not yet ceased; for such of the Bhungiyas of Bhagalpur as have adopted a pure life, have within the memory of man been raised from the lowest dregs of the people to the highest rank of nobility. On such a system no uniformity can be observed, and accordingly in different parts of India the rank of the same tribe or profession varies exceedingly, and in the following account that prevalent in Magadha is followed, so far as I have been able to ascertain by the assistance of Vyasi Pathak, a Brahman of Sakadwip, conjoined to the accounts which the Pandit of the mission obtained in travelling through these districts. Where nothing new occurs I shall merely refer to former accounts.

In my acconnt of Bhagalpur I have had occasion to men-

tion, that according to the Rudrayamal all the modern Brahmans are descended from a colony of Sakadwip called Magas, and the Pandit of the mission, with the usual carelessness of these people, assured me that no mention was made of any Brahmans previously existing in (Jambudwip) India; but I find that this is not exact, and that the book only asserts that the Brahmans previously existing there had become sinners. By this assertion, however, the Pandit has not far misled me, as none of the present existing Brahmans will, I believe, acknowledge a descent from these unprofitable sinners (*Patit*); and, as I have before observed, the original rank of Brahman was not hereditary. I presume that the term sinner was given to these old Brahmans when the new colony obtained power; for, in fact, the word, in a very usual acceptation, means merely that the person to whom it is applied differs in religious opinions from the speaker. It therefore appears to me, that the Magas on arriving here assumed the title of Brahman, applied then probably to all honourable persons, and introduced the doctrine of hereditary caste, and that from them the present sacred order is descended. But the accounts given of this colony in different books differ exceedingly, as usual in every thing respecting the Hindus. In the Rudrayamal, it is said that they were brought to this country in the iron age, after the total corruption of manners; but it mentions nothing of the person at whose request they came, nor of the place where they settled previous to their going to Kanyakubja. In the Samba Puran, it is alleged that they were brought to officiate as priests of the sun by Samba, the son of Krishna, because the Brahmans of this country had become impure, and because there was no fit priest in Jambudwip. The temple of the sun, at which they were placed, was on the Chandrabhaga river, in Mitrabana; but where that is I cannot exactly say. Some Pandits, whom I have consulted, seem to think that it is near Jambu, towards Kasmira. No mention is made of when this happened, nor of their emigration to Magadha, nor Kanyakubja; but it is generally asserted that Samba flourished at the commencement of the iron age (*Kaliyug*). Farther, according to this authority, 18 families or tribes (Kul) were brought, and this division still continues among the Sakadwipis, and it was from this book that the

original names of the four tribes of Sakadwip, mentioned in my account of Bhagalpur, were taken. On the same authority it is alleged, that the Brahmans of Saka are not descended from the holy persons created by Brahma, but are composed of sun-beams; yet the names of several of the seven Rishis created by Brahma are attached to the families of Sakadwip, and the Kanyakubjas are divided into similar Gotras, although the subdivisions in use among them are more numerous, probably from subsequent leading men having communicated their names to all their descendants. In the Parasarasanghita it is mentioned, that all the Brahmans of Jambudwip having become impure, by instructing the low castes, pure men were brought from Sakadwip by Garur; but this work enters into no farther particulars. The Pandits however think, that from this must be implied that all pure Brahmans are descended from this colony, and of course, that all the 10 nations are descended from the Sakadwipis.

In the Ayodhyakhanda of the Skandha-Puran, although supposed to have been written by Vyas, who also composed the Samba-Puran, a totally different account is given. It is there stated, that Dasarath Raja, the father of Rama, who flourished in the silver age (*Tretayug*) many thousand centuries before Samba, brought these Brahmans from Sakadwip to a great feast, where many Munis and persons of the sacred order were assembled. After the feast, the Brahmans of Saka were loaded with presents and sent home. This same book mentions that a certain Gaya, who had been king of the whole world within the seas for 6000 years, gave great offence to Surya, by applying to the Brahmans who studied the Vedas, and for neglecting the Brahmans of Surya. On this account the king and all his Brahmans were afflicted with the leprosy, and were told by Surya, that they could only be cured by drinking the water in which his Brahmins, the Sakadwipis, had washed their feet. On this account, the king and his Brahmans went to the banks of the milky sea, and were cured. Krishna afterwards brought 18 families into Jambudwip, in order to cure his son Samba of the leprosy. When the cure had been performed, these Brahmans, called Magas, wished to return to their own country; but Krishna, Narad and others were very desirous

for them to stay, and having persuaded them, Krishna prayed to the Magas and sent them to Magadha, to which they were conducted by Samba, and placed at Sambakhyagram, north from Giribraja (Giriyak), where he resided. Although Samba thus lived close to the capital of the Brihadrathas, then the chief kings of India, he is said in this book to have been the great king; but there is still another circumstance more troublesome to reconcile with any thing like history. A certain Srenik Raja was then king (*Nripati*) of Magadha: this person having killed a tame deer belonging to a saint, was cursed with the leprosy, from which he recovered by drinking the water in which this colony of Brahmans had washed their feet, a beverage to this day not unusual among the sinners of India. In these Purans desperate anachronisms are not uncommon, and this seems to be one. Raja Srenik, according to the Jain, lived in the eighth century (A. 751), before the birth of Christ, and in their account there is nothing improbable. Although, therefore, it is very possible that Srenik may have drank the washings of these Brahmans feet, if he was contemporary with the first arrival of the colony, it must have been long after the time of Samba and of the Brihadrathas. In this book there is no mention of the colony of Sakadwipis sent to Kanyakubja, nor of their descent from the sun, although it mentions that this deity called the Sakadwipis his own Brahmans, in contradistinction to the followers of the Vedas.

Magadha is no doubt the ancient place of settlement of the Sakadwipi Brahmans or Magas, and there they still continue to be one of the most numerous classes of the sacred order, and amount to above 2000 families, who adhere to the proper duties of their order. I am told, that east from Haridwar there are many Brahmans who retain the name of Sakadwip, but have disgraced themselves by the profession of arms and agriculture, and even hold the plough with their own hand; but it is only in Magadha and the immediate vicinity, that the Sakadwipis adhere to the proper rules of the order, or are men of learning.

The Sakadwipi Brahmans in their customs entirely resemble the five northern nations of the Kanyakubja tribe (Pangchagaur). Many of them are men of learning, and still more without learning act as Gurus and Purohits, many are phy-

sicians, and a good many have taken service, but this, or even the officiating as priests in temples, produces no difference of caste, and all the Sakadwipis seem to be able to eat and drink together, when the purity of their descent is ascertained; but in this they are very cautious, and seldom marry out of their own *dal* or company, all the members of which are well known to each other. These companies have no chief, everything is settled by an assembly of the company. The Sakadwipis are not only divided into tribes (*Gotra* or *Kul*) but into townships (*Pur*), all derived, so far as my informants know, from places in Bhojpur and Behar, that is to say in the country anciently called Kikat. A man can neither marry a woman of the same tribe, nor of the same township. Some of these townships are again divided by local distinctions into classes, that do not intermarry; for instance, the Khantawar township is divided into Durabdiha, Labandiha, and Kantaipur, deriving their names from three villages, the two former in Shahabad, the latter in Behar; but many Khantawars reside in various other places, and in these three places are many Brahmans of other townships. A very few Sakadwipis have become village (*Dihi*) Brahmans, act as Purohits for low tribes, and explain to them the decrees of fate by means of an almanac. These are excluded from the communion of the others. None of them now, whatever they may have been formerly, are of the sect of Surya; and notwithstanding what is asserted on the Skandha Puran, they all admit the divine nature of the Vedas, books however, which were probably written long after their arrival in India. By far the greater part here follow the doctrine of Ramananda, but a good many are of the Sakti sect, are guided by the Tantras, and follow chiefly the Virbhav, but this is kept secret.

According to the Rudrayamal, as has been mentioned in the account of Bhagalpur, the Magas or Brahmans of Saka, some time after their arrival in Jambudwip, sent a colony to Kanoj, from whence the sacred order was dispersed over India; and I have also mentioned, that all the ten tribes now prevailing in India are said to be descended from this colony. I shall now proceed to treat of these tribes.

Of the five northern tribes that of Kanoj is in these districts by far the most numerous, and is said to amount to about 3,000 families. There are many divisions, apparently

local, such as Antarvedi, Saryuriya, Sanauriya and Sukla, but of these I cannot state the proportions, because in some places the Pandit, in taking a list of the castes, attended to them, while in others this was neglected. Among the Brahmans of Kanoj settled here are a few men of learning; the greater part live by acting as Purohits; many are in service, chiefly as messengers or soldiers, but a few as clerks, and accomptants; and some live by trade. By far the greatest part have lands, which they cultivate by means of servants or slaves, but they do not work with their own hand. Almost all eat meat and fish. They are mostly of the sect of Rama, but a few worship Krishna, or the Saktis. The worshippers of Rama have no objection to repeat the ceremonies used in the adoration of Siva, or of any other god, that the votary, who employs them (*yajaman*) chooses.

Of the five tribes of Kanoj Brahmans, that have settled in Bengal, only two families have obtained a fixed abode in these districts; but the Magadha Srotriyas mentioned in Bhagalpur are here said to have been originally the same with the Vaidikas of Kanoj, who settled in Bengal. So far, as I can learn, however, there are no Vaidikas known at Kanoj, or in its vicinity; and it is probable, that this colony, when it proceeded eastward to Magadha and Bengal, assumed the title of believers in the Vedas, with a view of having it thought, that the Brahmans previously settled in these countries were tainted with heresy. Of this tribe about 3,000 families have settled in Patna and Behar. I have heard of no one of them, that could be considered as at all learned; but a very large proportion of them adhere to the duties of the sacred order, and act as priests. They almost all have lands, but they do not apply their hands to labour, nor to arms, and very few indeed take service.

The Maithilas, so numerous in Bhagalpur, have here obtained little footing; but they allege, that the smallness of their number is to be attributed to their love of purity; for Magadha is such an impure country, that, whoever dies in it, becomes an ass. About 200 houses however consent to run this risk, and several are men of learning, who probably despise such nonsense. They all live by the proper duties of their order, or by the produce of their land. In these districts are about 120 families generally admitted to be of the Gaur tribe; but a colony of masons from Jaynagar pretend

to be of this tribe of the sacred order; and in fact possess some science, but no one else admits the validity of their claim. I have already mentioned the difficulties that exist concerning the original seat of this tribe; and I am here told, that the Adi Gaur, or country originally so called, includes Hariyani, Kalpi, Panipat, Kurukshetra (Delhi), and Haridwar, that is the banks of the Yamuna and of the upper parts of the Ganges. Of the Saraswat tribe about 130 families have obtained a settlement in these districts, so that the Utkal tribe is the only one of the northern division, that has not here acquired a footing. Of the southern division about 70 families of Maharashtra, 10 of Andhra, 28 of Gujjara, 7 of Karnata, and one of Dravira have made a settlement, and among the first are several men of considerable learning. A Basu Raja brought a very large colony of Brahmans from the five southern nations, and settled them at Rajagriha. They are now reduced to about 100 families, who have given up all national distinctions, and all connection with the Brahmans of the countries, from whence they came.

Among the 10 tribes of Brahmans are some, who by low professions have lost their rank, and are in so little esteem, that they no longer preserve national distinctions, and they intermarry and eat with all those of the same profession. Among these are about 300 houses of the Agradani or Kantahas, who read the ceremonies when Hindus are burned, and who receive the offerings made on the 11th day after a parent's death. There are also about 24 families of Ganggaputras, who frequent places of worship on the bank of the Ganges, but are shunned by pure persons, and live chiefly by deceiving strangers or low people, for whom they perform the ceremonies used in worshipping the holy stream. These Brahmans are of the same tribe with the priests of Benaras; but whether or not they are there degraded I do not know, nor do I know from what source their origin is derived.*

I now proceed to mention several kinds of persons who are allowed to be Brahmans, but are considered as of a different origin from both Magas or Kanyakubjas. Of these the most remarkable in this district are the Gayapal or Gayawal Brahmans, concerning whom I have already had occasion to

* These details are given that the European reader may form an idea of the variety of caste in India.—[Ed.]

mention much, and who, although created by Brahma, are of a more recent formation than the first origin of men. It must be particularly remarked, that these Brahmans are divided into 14 Gotras or families, and these bear the same names with 14 of the Gotras of the Sakadwipis; and of the 10 nations. It is usually alleged, that these Gotras in use among the Hindus are family appellations, and mark those who bear them to be descended from a common parent in the male line; but the above circumstance is in direct opposition to this theory; and it is also worthy of remark, that many Gotras of Sudra tribes bear the same names with the Gotras of Brahmans. Of the Gayawals there are about 1000 families. I have already mentioned many of their customs; but some remain. A Gayawal man cannot marry a second wife, even if his first wife has died, unless he can find a single girl whose father has died, but this very seldom happens, as the girls are married very young; and unless the orphan is exceedingly poor, she will not accept of a widower for her husband. Their marriages are intolerably expensive. Like the Brahmans of the south they eat neither meat nor fish, and they will willingly eat the food prepared by the Pangcha Draviras, but these will not return the compliment. All the ten tribes however show these ignorant dissolute fellows great respect, and wherever they meet them, touch their feet with their hands. The Brahmans of Sakadwip abstain from this worship. Most of the Gayawals follow an unmarried sage of the Madhava sect from the south of India, and the Maharashtra Brahmans are their priests (Purohits). Next to these the most remarkable are the Dhamin, Dhanushka, or Pretiya Brahmans, who are supposed to be a colony from purgatory. Dhanushka, it must be observed, signifies an archer, and the Dhanuks, very common in this country, and probably one of its aboriginal tribes, derive their name from the same circumstance; and I suspect, that this colony of Brahmans, amounting to about 400 families, are the original priesthood of that tribe. They may marry as many wives as they please. They need not abstain from animal food unless they like, but many of them avoid this indulgence. They worship Rama; and Kanoj and Sakadwipi Brahmans perform their ceremonies. A more numerous class of Brahmans, but very low in estimation, are the Kraungchadwipis

mentioned in my account of Bhagalpur. It is generally admitted, that they do not belong to any of the ten nations, and it is usually alleged, that they came from a very remote region called Kraungchadwip, as I have stated in my account of Bhagalpur; but for this the Pandit has not been able to find any written authority, and some people allege, that Kraungchadwip is a small island in the Yamuna river, from whence these Brahmans originally came. In this case they should belong to the Kanoj nation, unless we suppose them to be the remnants of an ancient priesthood that were expelled by the colony of Magas, who settled at Kanoj. They are divided into two tribes, Kusahar and Vihar, the latter derives its name from this country, and the other name probably is also that of some place. Almost the whole of them study the mummeries of astrology, on which account they are called Jausi, the vulgar pronunciation of the Sangskrita word Jyotish. None of them have any celebrity in that, nor in any other science, and they are chiefly priests (Purohits) for the lowest of the people. They also rent land, but do not cultivate with their own hands, and abstain from all service. Most of the village (*dihi*) Brahmans belong to this class, which may amount to above 2100 houses, of whom 1300 are of the Vihari division. They are chiefly of the Sakti sect, and act as Gurus and Purohits for each other. They eat fish and meat, and many of them drink, following the indulgences of the Virbhav. In these districts are about 150 families of Brahmans called Yajurhota or Yaja, who are priests (Purohits) chiefly for low castes, and many of them are village Brahmans. I can learn nothing concerning the origin of this tribe. Their name implies their following or worshipping according to the rules of one of the Vedas called Yagu, and they are probably the same with the Yajurvedi Brahmans of Nepal, who would seem to be the first tribe of the sacred order that penetrated into that country, and are there still the most numerous class of Brahmans.

In this district are about 30 families of Kasmiri Brahmans, one of whom is considerably learned, and this tribe has a very high reputation for science, Kasi, Kasmir, and Mithila holding a great pre-eminence as seats of learning. The Kasmiri Brahmans are considered as quite distinct from the ten nations; but the number here is so small, that I cannot

venture to treat on their manners nor history, especially as I had no opportunity of conversing with the man of science. In these districts are about 40 families of Mathura Brahmans. They seem to have been the original priests of Mathura, celebrated for the adventures of Krishna, and they all worship that god. They abstain from animal food, and ought to live pure, but are not much respected, and some of them live by trade; but others act as priests (Purohits). I cannot find any thing concerning their history, but it is generally admitted, that they do not belong to the ten nations. The last of the sacred order that shall be mentioned are the Dakatiyas or Ghariwalas, that is robbers or bell-men. They are called by the latter name because they understand a little astronomy, so as to be able to strike the hours by means of a *clypsedra*. The former name, which might be a good deal extended, they receive, because they impose on the ignorant by their fables and false pretensions. They have the sense to operate chiefly on women, and frighten such as will not be charitable by holding out some terrible impending evil. I have been able to learn nothing of their history. They are said to be very numerous in Shahabad, but here there are only about 40 houses.

In this district there is an immense number (80,000 families) of Brahmans, who, like the Sakadwipis east from Haridwar, have betaken themselves entirely to agriculture and arms, and cannot be considered as belonging to the sacred order. In my account of Bhagalpur and Puraniya some notices have been given of this tribe under the name of Magahi Bhungihar and Zemindar Brahmans, and to these notices I shall partly refer; but most of them allege, that I was misinformed in Bhagalpur, when I was told that in Magadha they hold the plough; for although they perform every other operation of husbandry, they abstain from this profanation. I am however assured by the other Brahmans that this is not strictly true, and that many actually hold the plough. Here in general they are not at all offended by being called Magahi or Bhungihar, and it is only on the immediate boundary of Bhagalpur that these names are considered as in any manner disgraceful. I have little doubt that they are the descendants of the ancient nation of Brachmanni, and they still occupy by far the greatest part of the

land in this district, and are both able and willing to defend their property, against all who might attempt to seize it. In my account of Bhagalpur I have supposed, that this tribe is descended of certain Sudras raised to the military dignity by Mahananda king of India, in the fourth century before the Christian era, and this perhaps may be considered as finding support in an allegation very usual in this country. It is alleged, that this military tribe is properly called Bamhan, and that this name is quite different from Brahman; but this I doubt is not a tenable opinion, as Bamhan is the only name by which the sacred order is known among the Bengalese in conversation, and by all the Pandits whom I have consulted, is considered as a mere imperfect pronunciation of the word Brahman. In this district it is by some alleged, that the military Brahmans are in reality Sakadwipis, that tribe having so multiplied, that they could no longer find a subsistence by their proper profession; but the best informed among the Magahi Brahmans claim a descent from the Kanyakubjas. This however it may be suspected is a mere pretence, the Kanyakubja tribe being at present the most honourable. On the whole the conjecture made in my account of Bhagalpur of their being descended of the Sudras elevated to dignity by Mahananda, still appears to me the most probable opinion, and in the early ages the term Brahman would not appear to have been hereditarily annexed to the sacred order. It must be farther recollected, that there is a tradition of these Brahmans having wrested the country from the Kol, and Mahananda governed soon after the Sunakas, whom I suppose to have been princes of that tribe.

The Magahi Brahmans follow the customs usual with the military tribe of the country, as I have before said, and many of them are so ignorant that they do not know to what sect they belong. I am indeed told, that a good many of them will not take the trouble of applying to their Guru for the usual form of instruction. The subdivisions, which I have mentioned in my account of Bhagalpur, are analogous to the Purs of the Sakadwipis. Next the Brahmans, the Rajputs hold the highest rank, and are universally allowed to be of the Kshatri or royal tribe. They may amount in all to 14,000 families, and appear to me to have been chiefly introduced in the Muhammedan armies, especially by the Mayi family,

which, before its conversion to the faith in Muhammed, was of this warlike tribe; and in its long struggles to expel the military Brahmans introduced many Rajputs, and gave them lands. The Rajputs in this district are of many different tribes, Chauhan, Chandel, Sirmaur, Gajakesari, Gahalat, Bakawar, Kinawar, Chhilatiya, Sorki, Gahawar, Rathawr, Dikshit, Bisen, Purniya, Bhojpuriya, Lotamiya, Pamar, Pengwar, Nautun, Sulaki, Kachwaha, Gautam, Bayes, Maharor, Baghel, Ganawar, Sakawar, Kochaniya, Mariyar, Raghubangsi, Dhongr, Bundela, Grihastha, and Desi. I cannot specify the number or proportion of each of these tribes, because it was in some divisions only that the Pandit attended to the distinctions, and by far the greater number he put down merely as Rajputs. Most of these divisions seem to be derived from different places, where the tribe had formerly settled; but others are of a contrary nature. The Grihasthas are such as have contaminated their hands by the plough, although the word means merely men who have a house; but in this country the term ploughman (Jotiya) being contemptible, these useful men are usually called Grihasthas, as less obnoxious. The Desi Rajputs again are bastards, and many of them are descended from low women, the spoil of war. Most of the Rajputs follow the Dasnami Sannyasis, but many are worshippers of Rama, and some of Radha. Their priests (Purohits) are mostly Kanoj Brahmans.

Although the Rajputs are here universally admitted to be Kshatriyas, there are, as in Bhagalpur, other pretenders to that rank whose claim is not generally admitted, and who will be mentioned in the places that are assigned to them, by those who are not in their power. It must however be observed, that their claims to a descent from the original regal tribe is probably as well founded as those of the Rajputs; for 1st. none of the Magadhas, or real royal tribe, are said to have been brought from Sakadwip; 2dly. the Rajputs are said, in the Rudra-yamal, to be of a mixed tribe, formed by a connection between the sacred and mercantile orders; but this doctrine, as I have said of the mixed origin of tribes, is very doubtful, and this assertion can only be taken to imply, that when the Rudra-yamal was composed, the claim of the Rajputs to be Kshatris was not admitted! 3dly. there is great reason to think, that at least some of the Rajputs are the

offspring of some Persians that fled to India to escape Muhammedan fury. In fact, every military tribe that has sufficient power, seems to have been admitted by the Brahmans into the regal caste, so soon as it became subject to their authority, and betook itself to a pure life. The ancient tribe of Khatris, who probably opposed Alexander on the banks of the Indus, were perhaps in the number of those thus admitted, and in this district there are above 900 families. Being less powerful than the Rajputs, they are here reckoned lower, but still are considered as higher than any other class. Many of their women are accused of wantonness. One half of them are by trade goldsmiths, perhaps owing to the wantonness of their mothers, as, in Ronggpur, this is the trade which the sons of prostitutes have adopted, and judiciously so, as the demand of their kindred serves to give them much employment. Their proper priests (Purohits) are the Saraswat Brahmans, but most of them have adopted Nanak as their spiritual guides. Both Rajputs and Khatris in general retain the west country dress.

The Rumzani prostitutes sometimes call themselves Khatris; sometimes they allege that they are of the Rajput tribe, but this seems merely a pretext to purity, so that no caste may scruple to frequent their company; because they purchase any sort of girls and admit them into their order, although they educate them according to the rules and customs of the military tribe. The high tribes, being anxious for their company, do not dispute their claim to rank.

One house in Nawada, educates its sons as Hindus, and its daughters as Muhammedans. The Hindu bards, or rather parasites (Brahma Bhat), are placed next to these military tribes, and may amount to about 380 families, most of which have trifling endowments. They are very impudent fellows, and when any one offends them, they make an image of cloth, call it by their enemy's name, and go round heaping it with insult and abuse, whieh enrages the prototype beyond all reasonable measure.

Next to the Brahma-Bhats are placed the Baniyas, who, in Bengal, are considered as rather low. Here they are admitted to be Vaisyas, the third or mercantile tribe of the Hindus, although there are among them many gradations. On the whole there are about 8000 families, of whom the

Agarwalas are reckoned the highest, and amount to about 310 families, divided into Agarwalas and Puri-Agarwalas. The heretical Srawaks or Osawals, amounting to 200 families, the Agarharis, amounting to 133 families, the Bayes-Baniyas, amounting to 33 families, and the Yasawar, amounting to 53 families, are of the same rank, and are admitted by all to be pure Vaisyas. In general these are rich men, and not only can keep accompts, but are acquainted with the legends composed in the vulgar tongue, the only science permitted to the profane tribes. The orthodox Vaisyas of this class are all of the sect of Vishnu, part worshipping Rama, part Krishna, and all their priests (Purohits) are Brahmans of the Gaur tribe. The above are the tribes that in Puraniya are reckoned Vaisyas; but all the others are here admitted to that dignity, and of course none of their priests are degraded, as happens to many of them in Bhagalpur: the whole of them seem originally to have come from the west of India, and still retain the dress of their original country, which, with the greater part, seems to have been Agra, from whence the name of Agarwala is derived. Next in rank to these principal Vaisyas, are here reckoned the Maheswari, amounting to four families; the Purawar, amounting to 50 families, and the Barnawar, amounting to 940 houses. Their Purohits are Magadha Srotriyas, Kanoj and Sakadwipi Brahmans, and they mostly worship Rama or Radha. A third rank among the Vaisyas of these districts is held by the Luniyar or Runiyar Baniyas, amounting to about 2200 families; the Rastokis, amounting to 100 houses; the Mahuri, amounting to 1400 houses; the Kasaranis, amounting to 1900 houses; the Kasodhans, amounting to 130 families, and the Ayodhyavasis, amounting to 50 houses. Their Purohits are mostly Kanoj and Sakadwipi Brahmans, but they follow chiefly the sect of Nanak. The lowest rank of the Vaisyas includes the Jaonpuris, amounting to 290 houses; the Kamalkalas, amounting to 15 houses, and the Kath-Baniyas, amounting to 100 houses. Their Purohits are Srotriya or Kraungchadwipi Brahmans, but they belong chiefly to the sect of Nanak. Although these three lower classes of the Vaisyas are all traders, a great many of them cannot write nor keep accompts of any kind, and very few of them know any of the legends in the vulgar tongue.

I now proceed to give an account of those, who in this district are by all considered as pure Sudras, and who do not reject the appellation. Among these the Kayasthas hold the chief place; and, although they claim to be descended of a Chitra Sen, they do not pretend, as in Bhagalpur, that this person was created from the dust which covered the body of Brahma, and of course that he could not be a Sudra. They, on the contrary, allege, on the authority of the Rudrayamal, that he was a son of Bhuti-datta, who was the chief (Nayak) of the Sudras, created by Brahma. There may in all be about 7000 families. The greatest part (4000 families) of the Kayasthas in these districts are the Ambashthas, who seem to be the original penmen of Magadha, and they consider it as their home. Notwithstanding the above mentioned story in the Rudra-yamal, far from reckoning the Ambashthas pure Sudras, they are in that book supposed to be a mixed tribe, proceeding from a Brahman by a Vaisya mother, and that their proper profession is medicine; but the only physicians in India who, so far as I know, have any learning, except those of the sacred order, are the Baidyas of Bengal, who are totally different from the Ambashthas of Magadha. The Sribastav are the next most numerous class, amounting to about 1500 families; and, so far as I can learn, their original country is Tirahut, and they are probably the same with the Maithil-Kayasthas of Bhagalpur, although here they are open and avowed drinkers; abstinence from this enjoyment having probably been forced on the people of Mithila by the conquest of Lakshman Sen, king of Bengal. The Karan are here the only other numerous tribe of Kayasthas, and amount to about 900 families. They are considered as having come from the west of India. Of the Bhattanagar, Mathur, Saksena and Khara Kayasthas, there may be in all about 110 families. The remaining Kayasthas are a bastard race, called Krishnapakshi, arising from illegitimate connections of all kinds.

All the Kayasthas here apply to the duties of their profession, and acquire a knowledge of Persian and Hindi writing and accompts. Some few of them have studied a little Sangskrita grammar, and the usual poetry of the Persians; but in general they confine themselves entirely to accompts and forms of business, and are great adepts in all sorts of chicane. A great part, however, live by farming lands, which

they cultivate by their servants' hands, as they never work; but they have in their management the collection of almost the whole of the rents. The Mathur Kayasthas are the only tribe of them that think it necessary to observe the rules of Hindu purity, although many of the others, from motives of religion, abstain from several indulgences, which the rules of their caste allow. The Kayasthas here may eat meat that has not been offered in sacrifice, and they may drink all kinds of spirituous liquors. They do not scruple to smoke a pipe, to drink water, nor to chew betle at the same table with an infidel, on which account some allege that they are impure; but they abstain from marrying their brother's widows, which all the lower tribes in this country do. One half of the Kayasthas follow the Dasnami Sannyasis, one-fourth the Kanoj and Sakadwipi Brahmans, and one-fourth Nanak. Their Purohits are chiefly Kanoj and Sakadwipi Brahmans. Those who do not follow Nanak are mostly of the Sakti sect. The tradesmen, who in this district are reckoned pure Sudras, are the Sungturash, Thathera, Kasera, Halwai, Tambuli, Mali, Barai, and Kandu. Masons and stone-cutters are called here Sungturash, Gongr, and Bhaskar. They may amount to 124 families. I believe that the whole originally came from the west of India, and I know that 80 families of them are descended of a colony introduced by Ahalya Bai to carry on her works at Gaya. They came originally from Jaynagar, and some of them pretend to be Gaur Brahmans, as they possess books on their art in the Sangskrita language, and are able not only to read them, but understand their contents. The head man among them, although his brother had made considerable progress in the study of astrology, acknowledged that they are Sudras. They live what is called a pure life. Their priests are Gaur Brahmans, and they all worship Krishna. The Thatheras, who work in the tin, lead, zinc, and copper, amount to about 700 houses, and have no subdivisions of which I heard. They follow chiefly Nanak, and the Dasnamis; and those who follow the latter, worship Bandi and the Gram-devastas. The Kaseras, who amount to about 320 families, although they work in the same metals, are a different caste; but of the same rank with the Thatheras, nor have they any subdivisions of which I heard. They have the same priests and gods with the Thatheras.

Goldsmiths (*sonar*) are in this district reckoned pure Sudras, and amount to about 2,100 families, of which about 1000 are of Kanoj, 450 are of Magadha, and 650 are of Ayodhya, but have divided into two branches, the Ayodhyavasis and Ayodhyapuris, the latter of whom are inconsiderable. The Hanojiyas follow the Nanaks and Dasnamis, and Kanoj Brahmans perform their ceremonies. The Maghaiyas have similar Gurus, but their Purohits are Srotriya Brahmans. The Ayodhyavasis have the same Gurus, and their Purohits are Kanoj Brahmans. The Maiyars are reckoned by many a kind of Sonars, and their rank is equal; but they do not intermarry, and they both work in the precious metals, and tin, copper, or iron vessels, on which account they are often called Rangdhaluyas. The Halwais are confectioners, and a few cultivate and trade in grain. They amount to about 3000 families. Here, as in Bhagalpur, by far the most numerous class of this caste (1,700 families) assume the name of Ganapatiga Madhyadesi, the meaning of which has been formerly explained. The next most numerous class derives its name from Kanoj, and amounts to above 900 families. Of the Magadha, or proper confectioners of the country, there are only 400 families. The Halwais composing the small remainder are called Purabiyas, as having come from the east, probably from Bhagalpur. The Purohits of the Halwais, who are rich, are Sakadwipi and Kanoj Brahmans; the poor are left to the Jausi. They follow mostly Nanak, but some adhere to the Dasnamis, and worship their ancestor called Ganinath and the Saktis. Three families of the analogous tribe of Bengal, called Magra, have settled in Patna, and are admitted to be pure Sudras; but they pretend to be higher than the Halwais. The Tambulis should retail betle, but some of them trade in other articles, or cultivate the land. They may in all amount to 900 families, divided into Magahi, Nushurkhani, Banarasi, Chaurasi, Kongriya, Bherera, Jaonpuri, Yasawar, Gazipuriya, and Rarhi-Chaudagrami. The Magahis who properly belong to these districts amount to almost two-thirds of the whole. The remainder seems to have come chiefly from the west. They follow chiefly Nanak, but a considerable part adheres to the Dasnamis, and worship Bandi. Their Purohits are Srotriya, Sakadwipi, and Kanoj Brahmans.

The Barais, who should cultivate betle gardens, have in some places betaken themselves to other kinds of agriculture. They may amount to 2000 families, of whom by far the greatest number (1,740 families) are called Chaurasis. The Magahis amount to 230, and there are a few called Samariyas and Yasawars. All these seem to be local distinctions. They follow chiefly the Dasnamis, and worship Bandi; but some follow Nanak. Their Purohits are Srotriya and Kanoj Brahmans. The Malis, who cultivate flowers, make garlands, and work in the pith of *sola*, amount to above 1000 houses, and are subdivided into Magahi, Sirmaur, Banarasi, Kanoj, Baghel, Kahauliya, and Desi. The Magahis or proper garland-makers of the country are the most numerous, amounting to about 300 families; the Sirmaur amount to about 300 families, and the Banarasis to 280; the other subdivisions are trifling. The Desis are a bastard race. The Kandu men build houses, and act as day labourers in agriculture, while their women parch grain. In this district they amount to about 4,500 houses, of which about 4,200 are called Korangch, 200 only belong to Magadha, the remaining few are from Kanoj, or are called Gongr, which implies a stone-cutter. Of the term Korangch I can learn no rational explanation, although some allege that it is a corruption of Kraungcha, a very remote country. Their Purohits are mostly Jausis. They follow chiefly the Dasnamis. They would appear to be rather a low tribe, as some of them eat village swine; but their purity is not disputed. They worship chiefly Guriya and Ramchandra, considering the latter as a Gram-devata. These are the artificers of pure Sudra birth; I now proceed to the agricultural tribes of the same rank.

The Koeris are properly the cultivators of kitchen-gardens, and almost the whole of them follow this profession, but almost the whole also have fields: many are rich, and some are the proprietors of the soil. The profession of gardening is here honoured, and the Koeris are admitted to be pure Sudras. This tribe seems to extend every where between Mungger and Delhi, and in these districts they may amount to 45,000 families, of which three-fourths are called Magahis, and about one-fifteenth may be Dangbes. Some allege that these two names are given to the same tribe. About three-twentieths are called Banpars, of which term I can learn no

explanation. A few retain the title of Kanoj, and the remainder consists of Jaruhar, Chiramait, and Bharn, all phrases of which no rational explanation is given. The greater part adheres to Nanak; many however belong to the Dasnamis, and some to the followers of Rama. Their priests are mostly Srotriyas, with a few Jausis. The Kurmis here are a numerous tribe of cultivators, and some of them, as usual with the pure agricultural castes, carry arms. Such tribes appear to be aboriginal Hindu nations that were not of sufficient consequence to be admitted into the order of Kshatris; but too powerful to be thrust into the dregs of impurity. In the whole there may be about 4,500 families. Considerably more than one half of the whole are called Magahi; one-sixth are called Ghametas, of which I can learn no meaning; one-seventh are called Ayodhiyas, a national distinction; the remainder is subdivided into Kurmi, (properly so called, who are very few,) Samsawar, Yasawar, Kuchisa, Chandani, and Desi. The last are a spurious race; some of the others are national distinctions. This caste seems to extend every where from Mungger to Delhi. Most of them follow the Dasnami Sannyasis, and their priests are chiefly Srotriyas and Jausis.

The Dhanuks are another pure agricultural tribe, who, from their name implying archers, were probably in former times the militia of the country, and are perhaps not essentially different from the Kurmis; for any Yasawar Kurmi, who from poverty sells himself or his children, is admitted among the Dhanuks. All the Dhanuks at one time were probably slaves, and many have been purchased to fill up the military ranks, a method of recruiting, that has been long prevalent in Asia, the armies of Parthians having been composed almost entirely of slaves, and the custom is still, I believe, pretty general among the Turks. A great many of the Dhanuks are still slaves, but some annually procure their liberty by the inability of their masters to maintain them, and by their unwillingness to sell their fellow creatures. I have already mentioned, that the Dhanushkas or Dhamin Brahmans, are probably the original priests of this tribe, who worshipped the ghost (*pret*) of some hero or saint, a practice very common in this country, and on that account have been called Pretiya Brahmans. The province of Behar, so far as I can learn, is the country where the Dhanuks chiefly abound.

In these districts there may be 7,000 families, of which more than a half are called Yasawars from the name of some country. The next most numerous tribe is called Dhanuk without addition, then the Magahis, then the Dojwars, and finally the Chhilatiyas, named after a country, but by no means the Silhet of Major Rennell, where there are no Dhanuks. This tribe is chiefly under the Dasnamis, but a few follow Nanak, and their Purohits are the Srotriyas and Jausis.

The above artificers and agricultural tribes are considered as equal in rank, and a widow is married by her husband's younger brother, by which they are distinguished from the Kayasthas. They reject pork and fowls, but purchase from the butcher meat, which has not been offered in sacrifice. Next to them in rank are four tribes, which live much in the same degree of purity, and who here are considered as pure Sudras, nor does a Brahman scruple to drink the water drawn by their hands; but they are held lower than the others, because they fish for sale, and carry loads on the shoulder, which is vastly worse than carrying a load on the head. The Rawani Kahar, who in Bhagalpur are called Maharas, in these districts are the most remarkable of these four tribes, and claim a descent from Jarasandha, king of India, in the 11th or 12th century before the birth of Christ, nor is this claim disputed by any except the Brahmans, who allege, that this king was a Kshatri and not a Rawani; but this cannot be considered as a valid objection, because, as I have said, some of the descendants of Viswamitra, a kinsman of Jarasandha's, are allowed to have been Brahmans, some Kshatris, and some even Mlechchhas. The tradition is so general, that in all probability these Rawanis are descended from the tribe, which during the government of the Brihadrathas was master of the country. Magadha seems to have been the original seat of this tribe, the number to be found anywhere else being very trifling. The Rawanis have been entirely reduced to slavery; nor does any one of them pretend to a free birth; but many from circumstances above-mentioned have lost their masters, and many more are allowed to do as they please for a subsistence. They are all willing to carry the palanquin; but not one-sixteenth of them are regularly employed in that way, and these have chiefly gone to cities for employment. The remaining Rawanis are cultivators,

but carry palanquins at marriages, or other ceremonies, and at leisure hours catch fish for their own use. They amount to about 10,000 families. They follow chiefly the Dasnamis, but a few adhere to Nanak. There purohits are mostly Jausis, but some employ Srotriyas. The Torhas mentioned in Puraniya and Bhagalpur are a similar tribe, but only 130 families are settled in these districts; many I am told, live in Tirahut. They chiefly live by fishing. The Kharwar have also been noticed in my account of the two above-mentioned districts. In Patna and Behar there may be about 30 families. Several of their chiefs still retain lands in Ramgar, and are of ancient families. The Bhar have been fully mentioned in my account of Puraniya, in the north-western parts of which, and in the adjacent parts of Tirahut and Nepal they were at one time the governing tribe. In Patna and Behar I heard of only four families. The lowest of the Sudras, the water drawn by whose hands a pure Brahman can drink without disgrace, consists of five tribes, who are reduced to the borders of impurity either by tending cattle, which they castrate, or by retailing onions and garlic, which are an abomination, or by using cloth that has been defiled by dead bodies.

The Goyalas, called Gop in the sacred language, are in these districts a very numerous class, and in many parts are not only accused of unfair dealings in their trade; but are suspected of being addicted to theft and robbery. These people, however low they may be held by the Brahmans, pretend to considerable dignity on account of their connection with the god Krishna, who, although a Kshatri of the family of the moon, was adopted by a Goyala, and many of his wives (1600) are said on some authorities to have been of the Goyala tribe. In some books indeed (as the Bhagwat) this is denied, yet in others (Brahmabaibarta) it is affirmed: and Radha, one of these ladies, is now by many worshipped as the chief deity. These circumstances may be noticed as another proof, that down to the commencement of the degenerate age (Kaliyug) nothing like hereditary caste had been introduced into India. It is contended by the pandits, who assist me, that in the time of Krishna the Goyalas were of the Vaisya caste, which opinion they support by the authority of the Amarkosh, and they allege, that the Goyalas have been

reduced to their present low rank, by having introduced castration into their herds. This in my opinion is another instance to show, that the castes in India were not originally hereditary. Although the proper duties of the tribe are to tend cattle, of the buffalo and cow kind, and prepare and sell milk, by far the greater part in this district are mere farmers, and hold the plough. There are in all about 20,000 families, almost one-half of whom are of the Majroti tribe, and four-tenths are of the Krishnat so called, because they claim to be near kinsmen of the god, although that honour is most usually considered by the Brahmans as belonging to the Ahiri tribe, of whom there are none in these districts. The remainder is composed of the Chautaha, Ghoshin, Goyariya, Behota, Barnarasiya, Maghaiya, Kanoj, and Jat tribes, all in small numbers. The last pretend, that the Bharahtpur Raja is of their tribe, and on that account they assume the title of Kshatri, a rank which, I presume, it would not be safe to dispute at Bharahtpur. These Jats have of late times been one of the most celebrated tribes of Hindus, and have on several occasions had the honour of foiling not only the Mogul, but the British arms.* The Goyalas are mostly under the guidance of the Dasnamis, but many follow Nanak, and among themselves there has arisen a kind of (Gurus) sages, who procure money from a good many, and are called Jhunukiyas. They are vagrants provided with a trident and some other mummery, and come from Tirahut, which seems to be a hot-bed of superstition. Whether or not they have there women and houses, I have not learned: nor have I heard, what is their discipline. When one of them approaches a village, he makes a noise with a drum, and waits, until his herd come to conduct him to their houses, where he adorns his trident, and holds it up for them to worship Gorha, which the trident represents. He then receives the oblations. The Goyalas have several other gods belonging to their own tribe, who will be mentioned among the Gram-devatas. Their purohits are mostly Jausi, with some Srotryas. The Gareris or shepherds, are here considered as of the same rank with the Goyalas, and as bordering on impurity. In the west of India they have of late had still more success than the Jats, and one of them named Holkar has there founded a government

* At the siege of Bhurtpore, in 1804-5.—[Ed.]

of considerable power. On this account, I am inclined to consider these Gareris as the same with the Curubaru, of which tribe I have given an account in my travels into Mysore; for one of the divisions of that tribe are said to have settled in the Mahratta territory, and to have betaken themselves entirely to the use of arms (vol. iii. p. 335), and are called Rawut. I look upon Karnata therefore as the original seat of this tribe. The widow of Holkar (Ahalya Bai), I have had frequent occasion to mention. In Puraniya the shepherds are reckoned impure; but here that is not the case. In these districts there are about 1,200 families. They are called Gareris from tending sheep, and Kambaliyas from weaving blankets. These are their principal occupations, but they also hold the plough. They follow chiefly the Dasnamis, and their purohits are chiefly the Jausi Brahmans. The people, who carry torches in these districts are called Bari, and Rawut, on which account I suspect, that they originally were of the same tribe with the shepherds, and they hold the same rank. Their profession is looked upon as low, because their torches are often made of cloth, which they purchase from those who carry out dead bodies, and who collect it from the biers. Besides carrying torches, the people of this tribe prepare the platters of green leaves, out of which the Hindus eat. In all there are about 300 families.

The Khattiks mentioned in Bhagalpur are here also reckoned pure, notwithstanding that they sell onions, which are an abomination. They deal in all kinds of warm seasoning, but are petty traders. There are in all about 300 houses. Their Gurus are chiefly Dasnamis, and the Jausi Brahmans perform their ceremonies. The Kemanis as in Bhagalpur follow the same profession, and amount only to 140 houses. I shall next treat of the impure Sudras, the water drawn by whose hands a pure Brahman will not drink; but they are divided into two classes. In the first are those, with whose water the military Brahmans, Rajputs, and other pure but profane tribes make no scruples. The water drawn by the hands of the second class is rejected by all who pretend to any purity; yet they are not utterly abandoned to uncleanness, and will not eat pork nor poultry, much less beef. In the first class of impure Hindus are reckoned 11 tribes, partly artists and partly fishermen. The Kumbhars or Potters, reckoned pure in Bengal, are here impure, the good

reason assigned for which is, that they cut the throats of the vessels that they make, when they take them from the wheel. Had they cut human throats, they probably would have attained a higher station. They in general confine themselves to the exercise of their calling, and very few cultivate the land. In all there may be 3000 families. By far the greater part are called Magahis, as belonging to this country; but 180 families are supposed to have emigrated from Kanoj. They receive instruction, such as it is, from the Dasnamis; and Jausi Brahmans perform their ceremonies without much disgrace. The blacksmiths (*Lohar*) in Bengal are considered pure; here they are impure. The whole are supposed to have come from Kanoj, and may amount to 1600 families. The Kol having been workers in iron, it is probable, that in ancient times there was no separate profession of blacksmith. A few cultivate the land, but in general they work in iron, or make the implements of agriculture, although some of these consist of wood. Their spiritual guides are chiefly Dasnamis, and Kanoj Srotriya, and Jausi Brahmans perform their ceremonies. The Barhai are carpenters, and few only do any other work. Why both in Bengal and here this profession, perhaps the most cleanly of all handicrafts, should be reckoned impure, it would be difficult to say. Ingenuity in this trade is so connected with almost every sort of improvement in the arts, that its having been so generally neglected may be considered as showing, that the Hindus were always backward. All the Barhais in this district are said to be original inhabitants of Magadha, and they amount to about 3000 families. Their spiritual guides are mostly Dasnamis, and Jausis chiefly perform their ceremonies. Both blacksmiths and Barhais worship Viswakarma, as a god peculiar to themselves.

The barbers (*nai*), who in Bengal are so haughty, are here reduced to this rank of impurity. The Dasnamis have the guidance of most of these, who trouble themselves to consult any sage, and the Jausis and Srotriyas perform their ceremonies. In these districts there may be 4,500 families of barbers, of whom 2,800 are said to have come from Ayodhiya, 800 are native Magahis, and 400 have come from Kanoj; the remainder are mostly of the kind called Behotas, who pretend to be high, and will not marry widows. A few are called

Sribastav, called so, I presume, from some country, because some other tribes bear the same appellation. The Laheri or Nari, who work in lac, belong to this class, and amount to about 300 houses, among whom I heard of no distinctions. They are all said to have originally come from a country called Sribastu. The Dasnamis and Nanaks give them spiritual advice, and the Jausi Brahmans perform their ceremonies. These are the tradesmen of the first class of impure tribes. The fishermen are divided into two kinds, one which uses boats, and another which does not manage these insecure vehicles. The former are called by the common title Malo, but are divided into five tribes. They border on the lowest class of impurity, so that the pure Sudras will drink water, which they bring fresh from the well, but will not touch what has entered the house of such suspicious characters. The Gongrhis, who amount to about 650 houses,, fish, manage boats, and cultivate the land: 600 of the families are called Banpar; the remainder consists of some families which have come from Tirahut and Kanoj. They are chiefly guided by the Dasnamis and Nanaks, and their ceremonies are performed by Jausis and Srotriyas. They seem to be a tribe that originally frequented the upper parts of the Ganges. The Suriya Malas amount in these districts to only 35 families. The Mariyari Malas are also a tribe of fishermen and boatmen from the upper banks of the Ganges, and in these districts amount to about 1000 families, which have similar guides and priests with the Gongrhis. The Kewats, a Bengalese tribe of fishermen mentioned in my former accounts, have found their way into these districts to the amount of about 700 families. They have placed themselves under the Dasnamis and Nanak, and Jausi Brahmans perform their ceremonies.

The Tiwars, who in Bhagalpur from various circumstances have been raised to the rank of pure Sudras, are here considered as impure, and about 100 families have settled in these districts. They no doubt have come from the lower Gangetic provinces. The Chotahas fish, but do not manage boats, and only 10 families are to be found in these districts. I now proceed to the lowest class of impure Hindus, the water drawn by whose hands no pure person, even of the lowest rank, will drink, but who still have adopted a considerable

portion of what is called purity. These are here divided into 10 tribes, partly fishermen or day-labourers, and partly artists.

The tribe called Chaing in this district is chiefly confined to the south-east part of the territory, belonging to the city of Patna. The Chaings are fishermen, boatmen, and cultivators, and may amount to 480 houses. They are guided by the Dasnamis, and Jausi Brahmans perform their ceremonies. I am told that Nator and the banks of the Padma are the parts where this tribe is most numerous. Those here speak the Hindu language. The tribe called Bindu is usually considered as a branch of the Beldars; but this is probably owing to their using the hoe, which is the meaning of the latter name. The ranks of the two castes are also nearly the same; but they never intermarry. The Bindus are fishermen, boatmen, and ploughmen, and dig with the hoe, chiefly in making ditches and roads. This is considered as a very impure profession. Of this tribe there may be 900 families settled near the Ganges below Patna. The Beldars, whose proper duty it is to dig with the hoe, are divided into two classes, the Nuniyas and Khatawas, that do not intermarry, and follow different professions. They are all cultivators, but the former in the proper season are employed to make nitre, and the latter to dig ditches, tanks, and canals, to build mud walls and reservoirs, and to make roads. On the whole there may be 3000 families, of whom a large proportion is settled in Sheykhpurah. The Dasnamis are their spiritual guides, and the Jausi Brahmans perform their ceremonies.

A great many of the Patwa tribe have become Muhammedans, being ingenious artists disgusted at the low situation into which they have been thrust.* A good many, however, still remain Hindus. About 600 families, simply called Patwas, knit strings of silk. About 100 houses, called Guriya Patwas, are weavers of Tasar silk, and about 700 families, chiefly in Phatuha, weave cloths of Tasar and cotton mixed, or of cotton alone, especially table-cloths and towels. Many of these are in easy circumstances, and some are rich. They are guided by the Dasnamis and Nanak, and Jausi Brahmans perform their ceremonies. By far the greater part of the

* The degrading effects of caste in keeping down the energies of a people, are very manifest in the whole of this statement.—[Ed.]

numerous tribe of cotton-weavers, on account of the lowness of the caste in which they were placed, have become Muhammedans, and Jolaha, the proper Hindi title, in these districts is very often applied exclusively to the converts, while the Pagans are most usually called Tangti or Tangtawa, that is, merely persons who use the loom. About 1,300 families adhere to the old religion, and are under the guidance of the Dasnamis, while the Jausis perform their ceremonies; 640 of the families are of Kanoj, 540 are of Magadha, 100 are of Tirahut, and 20 of Yasawar. A hundred families of the Aswini Tangti, or Tantrabays of Bengal, by settling in this country, have been degraded. They follow some few of the customs of Bengal, but have fallen into most of the impurities of the other weavers, on a level with whom they have been placed. Most of them follow the Haviri, but some have Dasnamis for spiritual guides; the Sakadwipi Brahmans perform their ceremonies. The Yogis here also are weavers, and amount to about 400 families. They altogether reject the Brahmans, bury the dead, and follow the doctrine of Gorakshanath; but it is said that Jausi Brahmans perform their ceremonies. Hitherto I have not been able to meet with any of their learned men.

The men who make and sell oil, and trade from market to market, as usual are placed in this low rank, and amount in all to 4000 families. The most numerous class by far, containing 3,200 families, derives its name (Magadha) from this country; 340 are of Kanoj, 170 are of Jaonpur, the remainder is of the tribes called Bareghariya, Ariyar, and Banaudhiyas, who give themselves airs of purity, and will not marry widows. A few of these pure persons are called Desi, which implies that they are of a spurious breed, and probably think to recover their rank by this affectation of purity. Many of the Telis have some little wealth, and the care of their souls is disputed by the Dasnamis, Nanaks, and Haviris. Their Purohits are Jausi Brahmans. Fifty families of the Gurer, mentioned in Bhagalpur, have settled in Jahanabad. On this subject I have nothing new to offer. The people of the tribe called Sungri, and mentioned in my account of Puraniya, are very often called Kulal, because many of them distil spirituous liquors. There are many subdivisions, a few of which, containing about 300 houses, never distil: of the remaining divi-

sions, amounting to about 3,700 houses, some members distil, some are dealers in retail and money changers, and many deal from market to market. The former classes are called Magahi, Bishtawar, and Banaudhiyas; the latter are the Ayodhyavasi, Kalwars, Kols, Chopdars, Yasawars, Yasars, Behotas, and Sanggatas. The Behotas are the most numerous, and are making an attempt to obtain purity by giving up the pleasure of concubines; and in the places where they have established themselves in force, they seem to have called all obstinate sinners by the name of Sanggata. The original and proper divisions seem to be the national ones of Ayodhiya, Kol, Yasawar, Yasar, Bishtawar, and Banaudhiya. The Kol are perhaps remnants of the tribe which once governed the whole country. Their little wealth has produced many candidates for the care of their souls. The Dasnamis have been most successful, then Nanak, then the Havirs, and finally the Ramanandi Vaishnavs. Their Purohits are the Jausi Brahmans.

The Pasis, who extract and sell palm wine, work as day labourers and make mats, and very seldom hold the plough; they amount in all to about 5700 houses; about 800 are of Magadha, and 50 of Rautas (Rotas R); but by far the greater part take the title of Tirsuliyas, because they have planted the sacred Ocymum, called Tirsuli in the vulgar tongue, and have thus become a kind of Hindus. Many are called Byadhas, probably from having been hunters, and still, I am told, adhere to this practice and sell the game. People of all ranks may hunt or fish for amusement, that is, may be wantonly cruel; but nothing in the Hindu idea of purity can be more disgraceful than to make a profession of these arts. The Dabgars or Dhalgars work in leather, and make bags for holding ghiu, oil and molasses, and targets of buffalo hides. They are said to have come from a country called Sribastu, west from Ayodhya, which is not mentioned in the Desmala of the Saktisanggam Tantra, nor do I know exactly where it is; but divisions of several tribes, Kayasthas, Laheri and barbers appear to have come from the same place; 50 families of the Dabgars have settled in these districts. Their spiritual guides are Dasnamis, and Jausi Brahmans perform their ceremonies. I now proceed to tribes that are considered as altogether vile, and for whom no person of the

sacred order will perform any ceremony, unless they depart from their beastly habits. I begin with some agricultural and military tribes, who appear to me to be descended from the aboriginal inhabitants of the country. Each of them has deities of their own, for which some of them act as priests (Bhakat), and at their ceremonies the sister's son (Bhangja), or sister's or daughter's husband of the man who is married or mourns, directs what is to be done. Many people in these districts consider these tribes as Kirats, and allege that the Kol or Chero were their chiefs; but, although their manners no doubt resemble those of the Kirats or Kichak, who occupy the eastern parts of Nepal, their features and original languages are very different. The whole now existing in these districts have adopted the Hindi dialect, but so intermixed with strange words and phrases, and spoken with an accent so different from that which is usual, that the pure castes, who have not been accustomed to speak with them, have much difficulty in comprehending their meaning. Concerning the Bhungiyas, I have had occasion to dwell very fully in my account of Bhagalpur, nor do I see any reason to alter the opinions there offered. It is on the boundary of Ramgar that they chiefly reside, and there the country belongs to their chief, two of whom have the rank of Pikayits. These have now taken the title of Suryabangsi Rajputs, live pure, and have Brahman priests and guides; but near the old residence of Jarasandha, and in Helsa, there are some families which are reckoned by all the people, among the very dregs of impurity, and eat beef, pork, camels, asses, horses, rats, cats, fowls, lizards, and in fact every thing that Hindus abhor. On the whole, there may be 4000 families living under their own chiefs, who observe some at least of the rules of purity, although most of them cannot give up pork nor poultry; and 600 families may be scattered through the district, and wallow in all their primitive abominations. They worship chiefly the Viras, or the ghosts of persons of their own tribe. In this district the most numerous of these tribes is called Musahar, and they, probably like the Bhungiyas, are the remains of the armies of Jarasandha. In some parts, indeed, Musahars and Bhungihars are reckoned two names for the same tribe, which is probably a just opinion. The Musahars may amount in all to 2400 houses. They are so

ignorant, that such as I procured to give an account of their customs, were alarmed, and I do not think that great reliance can be placed on what they said. They seem to be on the increase, many having come from Ramgar, chiefly about 20 years ago. They eat beef, pork, buffaloes, rats, fowls and all birds, except those of prey. They never, so far as they know, had any princes nor chiefs, nor do any of them possess estates in land. They cultivate the ground, and the men and women collect drugs and firewood. The men rear the Tasar silkworm, dig mica, and are keen hunters. They eat the food prepared by any Hindus of the least decency, but reject that of the Dom and other vile tribes of Hindu artificers, and of Muhammedans or other total infidels. None of them can read nor write. They marry only in their own tribe, but avoid all relations by either father or mother, so far as can be traced. The girls are married at from five to 12 years of age, and they excommunicate all women who may defile themselves with men of another caste. They have no Purohits, and at marriages there is no religious ceremony. Some red lead is put by the bridegroom on the bride's head, and they make mutual presents. Both parents join in the expense of the feast. A man who has a wife alive cannot take a concubine, nor is a plurality of wives admitted. When a man dies, his sons divide his property; if he has no son, the property goes to his widow. They worship the Viras or saints of their tribe, and have no images, but they offer sacrifices. The men on these occasions pray, and the women sing, accompanied to music of their own. Widows marry their husband's younger brother. They burn the dead, and mourn 10 days, when they give a feast. They believe that good people after death go to Kaitas, and bad men to Narak. Having no chiefs, all the business of the tribe is settled by Mathas, or councils.

The Rajwars are a pretty numerous tribe, most of whom are settled in Nawada, but some are scattered throughout these districts, and I have no doubt are of the same tribe with the Rachewars or Rajawars, mentioned in my account of Mysore (vol. 3, p. 435), although in that country they pretend to be of the Kshatriya tribe, and have adopted the rules of Hindu purity. Here the very reverse is the case; they eat beef, and every thing that shocks Hindu decorum.

They pretend that their common ancestor was a certain Rishi, who had two sons. From the eldest are descended the Rajwars, who became soldiers and obtained their noble title; from the younger are descended the Musahars, who have obtained their name from eating rats, which the Rajwars reject. A great many of them reside in the wilds of Ramgar, towards the frontier of Bhagalpur, and about 10,000 are in these districts; but none of them have any landed estates, nor do they suppose that any king or prince ever belonged to their tribe. They differ in scarcely any of their customs from the Musahars, except so far as has been already mentioned, and that at marriages the bride's father is at the greatest expense. The Rajwar and Bhungiyas are allowed to be higher than the Musahars, because probably both carry arms, which the Musahars do not. They all speak a very impure dialect of the Hindi; but I cannot learn that in Ramgar any of them have a peculiar language. The Musahars live chiefly in little round huts, like bee-hives; but the huts of the Bhungiyas and Rajwars are of the usual form. The Bhungiyas and Rajwars have chief men called Majhis, like those of the hill tribes in Bhagalpur; and the latter have leading men called Gorahas, who at all feasts are helped before the vulgar. This dignity is hereditary.

A few of the Dhanggars mentioned in the account of Bhagalpur, come to the two capitals of these districts, but they come merely for service, and have made no fixed abode. They tell me that there are two kinds of Dhanggar; one of these speaks exactly the same language with the Kols of Bhagalpur, the other speaks a very different dialect, although perhaps the two may have been originally the same. The Dosads have here the same customs nearly, as described in my accounts of Puraniya and Bhagalpur. Rahu seems everywhere to be the peculiar deity of this tribe, and they everywhere pretend to be descended from the soldiers of Bhim Sen. In general here, notwithstanding one of their gods being the protector of thieves, they have a good character; they are cultivators and watchmen. In the whole of these districts are about 7500 families, of which about 7000 are said to be of Magadha; the remainder consists of Kurins, Palawars and Chhilatiyas. There is some reason to suspect that the Chandals of Bengal are the same tribe with the

Dosads of Behar and the west of India; for the two castes follow nearly the same professions, bear the same rank, and the Chandals pretend to be descended of Rahu, and, I am told, worship that monster; whilst there are no Chandals in Hindustan, nor any Dosads in Bengal. In the usual fables the Chandals are said to be descended from a Brahman woman by a Sudra father; but, as I have said, this manner of accounting for the origin of tribes is by no means satisfactory.

I now proceed to the lowest and vilest of the artificers:—The Banaudhiyas are a tribe of weavers from some country of this name, which is said to be in the west, and from whence a tribe of Telis, and another of Sungris, as abovementioned, are said to come. These weavers eat hogs and poultry, and have neither spiritual guides, nor do Brahmans perform their ceremonies; but they worship Karu and Damu, two ghosts (Vira). They may amount to 280 families, chiefly residing in or near Patna. The washermen (*dhobi*) here live almost entirely by their own profession. On the whole there may be 2500 families, of which 1850 are of Magadha, 400 are of Ayodhya, 160 are of Kanoj, 80 are called Belawar, and the remainder is called Gosar. Of the two last denominations I heard no explanation. Their deities are Ram, Thakur and Rawat; they do not eat pork nor fowls, and in fact live like the Sudras, but are looked upon as very impure.

The Kangjars are a kind of vagrant gipsey-like tribe, of whom in this district there are only 19 families. They prey upon all kind of birds, which they can catch with a spike fastened to a long jointed rod. They reject beef, but eat crocodiles, or whatever else comes in their way. The men gather peacock feathers for sale, and make ropes of the grass called *sabe*, which seem to be the principal exertions that they make for procuring grain; but in the hot season they obtain a good deal by collecting for Europeans the roots of the grass called *khaskhas*. Their women are in this district the only persons who tatoo the female Hindus, but many Nat from other places share in this gain. They worship a goddess called Bibi, (a Persian word meaning lady), and a male called Porandhami. They offer sacrifices, and the priest, whose office is hereditary, is called Phuldhariya. They

pretend that they will admit into their society any person of high caste, and that such converts have been made; but they reject low connections. They usually live in small portable sheds, but in Patna they have two or three shops, where they sell ropes and the grass roots, and the owners have some little capital, and employ their brethren to collect. In my account of Puraniya this tribe seems to have been divided into two branches, the Kangjar and Khanggars, and the former have disgraced themselves by becoming public executioners.

The Pawangriyas are a kind of musicians who go about in small bands, singing and performing on various reed instruments, on the strength of which they beg. In this district I heard of four sets, who remain Pagans; but there are a good many who have embraced the Muhammedan faith.

The Dhari, whose women are called Mirasin, have in general become Muhammedans, but a few are still Pagans. They are much employed by the higher ranks, because their women both sing and are musicians, so that they can be admitted into the female apartments without restraint. The men dig tanks and ditches, and collect fire wood. About 120 families still continue Pagans. They eat pork, and worship Bandi and Ram Thakur. The Chamars or Muchi, who are tanners and workers of leather, have been often already mentioned. They amount in these districts to about 3000 families; and when not employed in their profession, cultivate the land, chiefly as day labourers, but some have farms; 2300 families are called Dhusiyas, 420 Magahis, 200 Guriyas, 30 Yasawars, 25 Dakshiniyas, 20 Kanojiyas, and 5 Jaonpuris. I can learn no explanation of the term Dhusiya, the Guriyas are probably named after the god so called. The other divisions are national. They worship chiefly Ram Thakur, Guriya, and the Viras, and have a kind of priests called Bhakats, who are not hereditary, but wear beads, abstain from the sensual gratifications of meat, fish, and liquor, and are the spiritual guides of the tribe. The laity eat beef, and of course every thing that is held abominable. Their women are the common midwives, and attempt to cure several disorders of the abdomen by frictions. The Sheraz-muchi are saddlers, who live much in the same impure manner with the other workers in leather, but do not marry with

them. They amount only to 15 families, confined to the capitals of the two districts. The Dharkars are a kind of basket makers, who, although vile, are not altogether so abominable as the Dom. About 20 families have settled at Sahebgunj. They reject the food dressed by impure castes or infidels. The Dom in this country is a very vile tribe, and in all may amount to 1000 families. Those called Magahis remove dead bodies, and act as public executioners, but they also make baskets. They amount to 600 families; 300 families called Dhaparas perform the same offices, nor do I know why they are distinguished from the Magahis; 100 families are called Bangsphors, because they work in bamboos alone: 90 of these are distinguished by no additional appellation, 10 have come from Kanoj. The Dom reject food dressed by washermen or Hulalkhors, but eat that of all other tribes, and even that of infidels. Many of them have very regular handsome features, but they are very dirty in their persons, and have been selected as the cooks for many European families, probably because, until the power of the English arose, no other tribe could be found who would touch the pork and beef of which we are so fond. The sweepers and scavengers are the lowest of all tribes, and in the Hindu dialect of this district are called Hulalkhor. Some have become Muhammedans, without escaping from their degradation, and 280 families are still Pagans, or at least do not profess the faith in Muhammed. In the south-east corners of the district have settled 20 families of the Haris of Bengal, who are the tribe analogous to the Hulalkhors of Behar.

In Patna are four families called Kari-Hari, hunters, who are probably a branch of the Haris, as they are equally vile and impure in their customs. The Hindus of this district are more uniform in their customs than those of Puraniya and Bhagalpur; because there is so little intermixture of Bengalese, that those who have settled here, have been obliged to comply entirely with the customs established in Magadha. Although there are many tribes settled here from the west of India, Kanoj, Yasawar, Ayodhiya, Sribastav, &c. there is little or nothing to distinguish the customs of these from the analogous tribes of Magadha; but some tribes, such as the Sareswat Brahmans, the Rajputs,

Khatri, and pure Vaisyas, in general use the west country dress; the Kanoj Brahmans, however, have in general adopted that of Magadha. It must be observed, that a great many women of Magadha have adopted the petticoat and boddice, as used in the western parts of India. The real customs of Magadha differ more from those of Mithila than I suspected in Bhagalpur, because in the latter the Maithil Brahmans have obtained a complete ascendency, while in these districts very few of them have settled. The differences have probably arisen, first from the settlement of ranks made in Mithila by Hari Singha Deva, and 2dly, from the conquest made of the greater part of Mithila by Lakshman Sen, King of Bengal, when the Bengalese character was probably introduced into the conquered province, and applied to write books of science, although accompts still continue to be kept in the vulgar Nagri.

The Sakadwipi Brahmans are considered as blameable if they eat rice that has been cleaned by boiling; but by this indulgence they do not lose caste, and they may safely eat grain which has been parched by the Kandus, or any thing that has been fried in ghiu, even by the hands of a Sudra, provided he is of pure birth. These are indulgences, which would be considered in Bengal as highly disgraceful. They may eat the meat of goats, whether male or castrated, that are offered in sacrifice; but not that of buffaloes. These are the only sacrifices which they offer, and they can eat no flesh except that of sacrifices, not even venison, and they reject the five pure animals of the Bengalese. They use however fish. A good many of them are alleged to be followers of the Virbhav; but as these drink in their worship, and as this action is thought disgraceful, this is kept secret, and no man confesses his belonging to that sect. All the Hindus, Brahman or Sudra, of the sect of Vishnu, are remarkably strict in eating, reject altogether rice cleaned by boiling, all parched grains, and animal food. The Vaisyas also are remarkably strict, but most of them are of the sect of Vishnu, or Jains, who are fully as severe. The other pure tribes, such as the military Brahmans, Rajputs, and much more the Sudras, do not scruple to eat the flesh of goats, sheep, deer, hares, partridges, pigeons, and ducks, wild or tame; but they reject the porcupine, guana, tortoise,

and other animals reckoned pure in Bengal. The Goyalas, although pure Sudras, on one occasion annually offer swine as a sacrifice, and eat the animal; but this is done by no other pure tribe. The impure Sudras eat nearly the same things with the pure; but the vile indulge themselves more than in Bengal. A great many of them avow that they eat the sacred animal, but such only as have died a natural death; and they also eat the carrion of horses, asses, buffaloes, and camels, and they kill hogs, fowls, rats, cats, tortoises, serpents, frogs, lizards, and many animals reckoned vile. All the Sudras, except those of the sect of Vishnu, drink avowedly; but those who pretend to be of the three higher castes, abstain in public from this indulgence. The Brahmans, except the Gayawals do not smoke tobacco, but they chew and snuff; and the military Brahmans, and all lower castes smoke without shame. No woman of rank smokes, and in the country scarcely any of even the lowest tribes; but in the great towns a few pure Sudras, and many of the vile and impure tribes indulge to a considerable extent in this dirty practice.

The funeral expenses are here much more moderate than in Bengal. The mourning of almost all castes lasts 10 days, and on the 11th day is given a feast. On this occasion as usual, the pure tribes perform endless ceremonies. Even the highest castes rarely commemorate their deceased parents either in the Tithi or Amavasya, that is to say, either on their death, or on the last day of each lunar month, but in the wane of the lunar month Aswin many commemorate their parents, on the same period of the moon in which they died. This custom is here called Pitarpaksha. In these districts the feet of the moribund are not put into the river, and the low and ignorant are allowed to die in their houses; but men of rank and learning turn their parents or children out of doors, when they think they are about to die. They are placed on a mat under every inclemency of the weather, and some sacred herb (*tulasi*), or stone (*salagram*) is placed by them, while prayers are read, until they die. If the moribund is rich, before he becomes totally senseless, there is put into his hand the tail of a cow, which he makes as the last offering to the Brahmans; but of course it is not every one that can afford such an offering. Natural affection has in

general struggled very hard against the barbarity of this exposure of the moribund; and although no man can avoid the ceremony, the natives of rank, from frequent observation, have acquired a very great skill in marking the symptoms, which immediately precede dissolution, so that their kindred are very seldom exposed, especially in this district, until not only all hope of recovery, but until sensation is over. Where custom renders it necessary, that they should die with their feet in the river, and their house is at some distance, no doubt more suffering arises from the custom, and the conjecture cannot be so certain; because the kindred cannot wait for the last symptoms. In general however, when any man is exposed to suffer long, the conduct of the kindred requires investigation; for there can be no doubt, that occasionally, although very rarely, this custom has been applied to the most atrocious purposes.

In this district the marriages are a most intolerable burthen, not as in Puraniya from low men endeavouring to purchase husbands of high rank; but owing to the expense of the ceremony. Still however the expense of marrying a daughter is always more severe, than that of marrying a son, because the brides' father always gives money to the father of the bridegroom. The vanity of the parties usually increasing with the rank of the individual, and that rank being often unconnected with wealth, many fathers of high family cannot procure husbands for their daughters, until after the age of puberty. In this country such are not absolutely disgraced, and almost every girl is married one way or other before 20, the father for the purpose begging and borrowing from all quarters, and selling all the property he may have; and he is very generally blamed, and considered as a great sinner, if he has not done so before the girl reaches her 11th year, because he must then be content to take whatever match offers, and his daughter will be married in a manner very unsuitable to her rank. In some parts of these districts it was alleged, that it was not the expense of the ceremony alone, which prevented men of rank from procuring matches for their daughters in due season. It was there said, that the Zemindars wasted the whole of their means on law-suits, and had little left for the due maintenance of their family dignity. The marriage season lasts in the utmost vigour all Vaisakh and Jyaishtha

(12th April, 12th June inclusive), during which little or no unavoidable labour is performed by any except musicians, and the attendants on the shows and feasts, and there are some married in Phalgun (11th February, 11th March) and Asharh (13th June, 14th July), but no Hindu will marry in any other month, but more especially in Chaitra (12th March, 11th April), when the Muhammedans perform that ceremony. The lower ranks are generally married under five years of age, as the presents required either for the friends or priests are trifling, and the feast is usually the produce of their farm or pig-stye. Very few of any country marry a second wife, while the first lives; and the custom of Sakadwip does not admit of this indulgence. A few rich men, when they have lived long with a wife, and have had no children, take a second. In this country the marriage (Vibaha) is properly only a betrothing, and the wife never enters the husband's house, and does not cohabit with him until she arrives at the age of maturity, when she is conducted home with great expense and ceremony. In Bengal the wife does not indeed live with her husband regularly, until the time of maturity; but she is carried to his house immediately on marriage, and, although she then returns to her parents, the marriage is always consummated so soon after 10 years of age, as the astrologer declares the time propitious. Widows, who burn themselves with their husband's body are much honoured, and a small temple is erected over the ashes. This is called Satichaura, or the abode of virtue, and offerings are made, especially at marriages. All widows here are admitted to the privilege of burning, when they receive the accounts of their husband's death, when he has died at a distance. In Bengal the widows of Brahmans can only burn, when they can accompany the corpse. A widow in Tikari proceeded farther even than the custom allows, and, having delayed burning for 10 years, imagined, that her husband was constantly calling to her. She therefore prepared a pile, on which she was burned, and gained the praise of all, although the action was not strictly legal, especially as she was of the sacred order. In these two districts, so far as I can learn, eight or nine widows are annually burned. The widows of all those pretending to be of the three higher castes, and of the Kayasthas, cannot enter into the state of a concubine; but those of

all the lower ranks may become Sagais, and, if they have no children, usually do so; and it must be observed, that many widows, among the low castes especially, are mere children, having been married under five years of age. Young widows among the Sudras of all ranks are taken as Sagais by their husband's younger brother, if he is single; but, if he is married, he must obtain his wife's consent. This however is usually given, as the family is disgraced, should the widow become wanton. If the husband had no younger brother, the widow may live as a Sagai with any man of the same caste that she chooses; but a married man cannot take a Sagai without the consent of his wife, and this is seldom given, unless as above-mentioned, the widow is a sister-in-law. No religious ceremony attends the union with a Sagai; but the connection is indissoluble, except for adultery. The children of a Sagai are reckoned equally pure with those of a virgin spouse.

If a woman has a child out of matrimony, she unavoidably becomes an outcast, and her child has no caste; but may become a Moslem or prostitute. Men of the Rajput Khatri and Kayastha tribes, but no others, openly keep women slaves of any pure tribe, and the children are of the same tribe with their father, but are called Krishnapakshis, and can only marry with each other. But most tribes, high or low, do not admit of this indulgence, and the children which they have by their slave women, are considered as belonging to the woman's tribe. No man loses caste by a connection with a woman, whose water he can drink; but, if he has a son by a widow or unmarried woman not his slave, the child is an outcast. In the foregoing account of the castes have been mentioned the principal sects to which each is addicted. When an Hindu is said to belong to such or such a sect, it does not in general absolutely imply, that he worships only such or such a god; but that such or such is his family (*Kula*) or favourite god (*Ishtadevata*). In some parts of India strict men will pray to no god, but their favourite and his connections, such as his spouse, sons, and servants; but in this district it is not usual to be so wedded; and although the daily prayers of the pious Hindu are offered to some one god, he without scruple has recourse to any other, of whom he thinks he may be in need; and never ap-

proaches any image or holy place without showing some mark of respect. The worshippers of Vishnu are every where the most strict, and some few of them here will neither pray nor even show common civility to any god but those of their own sect. Here a great proportion of the Hindus, among whom are even many of the sacred order, and a large share of the military Brahmans, attach themselves to no sect, do not trouble themselves with daily prayers, and consult no sage to receive a secret form of worship. These are at perfect liberty to apply to any god that comes in their way; and, when agitated by strong hopes or fears, are not behind their neighbours in the earnestness of their offerings. Besides, a very large proportion of the Hindus belong to the sect of Nanak, and these apply indifferently to all the images that are in credit, on which account they are reckoned orthodox *(astik)*, although they do not belong to any of the five sects established as such by Sangkar Acharya. Of these five, three only prevail in these districts; namely, Saiva, Sakta, and Vaishna; and, including the Nanaks to complete the orthodox, may be in the following proportions; Saivas three-sixteenths, Saktas five-sixteenths, Vaishnavs two-sixteenths, Nanaks six-sixteenths. The same persons being the sages *(gurus)*, who instruct both Saivas and Saktas, their real proportion is not easily ascertained, especially as a great many of the Hindus of these districts are so careless or ignorant that they never have taken the trouble to inquire from their instructor whether the secret prayer is addressed to Siva or Sakti, and they do not understand a word of it. Even the Gurus are themselves often so ignorant of their law, that they can give their followers no directions concerning what ceremonies they should observe: nor is the loss great, although these ceremonies would serve to point out the sect to which the performer belonged. It must be observed, that every Hindu who has received instruction *(upades)* from a sage *(guri)*, should pray once a day to his favourite god *(Ishtadevata)*; and that the form by which he is instructed to pray is always taken from the Tantras. The Hindu also ought to pray three times a day for the remission of his sins, by forms called *sandhya* and *ahnik*, the former taken from the Veds, the latter from the Tantras; but Brahmans alone are allowed to use the portions of the Vedas, the Sudras must content them-

selves with the Tantras. These forms are the same for all sects. In these districts many of those even, who have received instruction from their sage, content themselves with repeating this daily, and make no offerings; and very few trouble themselves to ask three times a day for the remission of their sins. In Bengal people are more attentive to these forms of worship.

Such as the sect of Sakti, as read at all, chiefly study the Mantra Mahodadhi and Mantra Muktabali, which are explanations of the Tantras, according to all the doctrines of the Dirba Pashu and Vir schools *(bhavs)*. None of the sect here acknowledge their following the last; but I am pretty well assured, that on many occasions almost every one follows its precepts. Of the first there are now-a-days none, which is no loss, as it requires most extraordinary affectation of sanctity, or the most consummate fanaticism, the doctrine teaching that the believer is the same with god, and ought therefore totally to neglect every thing corporeal or terrestrial. The names of the Saktis most usually addressed by this sect are Kali and Durga; but I do not believe that in the whole of these two districts there is either a temple or image of one or other; and the worship is almost always, as I have said, performed in private according to the rules of the Virbhav. The sect of Siva here have none of the works of Sangkara Acharya, nor of any great doctor of that sect; and, if they read at all, study the passages in the Tantras and Purans, in which their god is celebrated. None of the sect of Vishnu here adhere to that god by the name of Narayan, they chiefly adore Rama; some, however, adhere to Krishna, and a few to Radha. In the south of India the greater part of the sect of Vishnu *(srivaishnavs)* reject the worship of the incarnations of that god; and, considering him the same with the Supreme Being, address their daily prayers to Narayan as their favourite deity. But in these districts there are none of that sect, although many images are called Narayan, and receive some little adoration, such as an offering of a little oil or red lead; but all such images as I saw that were called Narayan appeared to me to have been taken from the ruined temples of the sect of the Buddhas, nor do I know what they were originally intended to represent. Although there have been many Avatars, or incarnations of Vishnu, the worship

of only two of them, Rama and Krishna, has given rise to sects, at least in modern times, and it is very rare to find any temples dedicated to the others, although their images are common among the ornaments of religious buildings. In this district, however, there are some temples of Varaha and Narasingha, and these occasionally receive offerings from people in distress or fear; but I have great doubt whether or not the images were originally intended for worship, many of them like those called Narayan, seem to have been ornaments taken from the temples of the Buddhists. In the Tantras, however, are forms of prayer proper for being addressed to these two deities, and to several other of the incarnations of Vishnu; but most of even the ten great incarnations of this deity, so far as I can learn, would never appear to have been objects of worship with the orthodox Hindus; for there are no forms of prayer that could be addressed to Buddha, Balarama, Parasurama, Matsya, Kurma, or Kalki; so that only four of these great Avatars would appear to have ever been worshipped; namely, Srirama, Narasingha, Varaha, and Bamana. Besides, of the other incarnations there are in the Tantras forms of prayer for worshipping Krishna alone, who is also called Gopal, Vasudeva, Hayagriva, Dadhibaman, Sangkarshan, and Harihara. Besides those who worship Rama and Krishna, some few men in different parts have addicted themselves peculiarly to the worship of one or other of these above-mentioned forms of the deity; but I have not learned that any such person has been able to establish any thing like a sect. The worship of Krishna and his spouse has branched into several sects. The greater part at least of the Tantras, which contain the forms of worship of Vishnu and his Avatars, although supposed to have been composed by Siva, are believed to have been divulged by Narada to Gautama. It must be observed, that no images of Vishnu, so far as I know, are by men of any sense called by that name; and the only thing worshipped by the name Vishnu are marks on stones, said to be the impressions of his feet. In these districts there are several images called Brahma, and several sacred places bear his name; but he is not an object of worship, nor has any person that I have consulted ever seen in the Tantras any form, by which that god could be addressed. Although in these districts there are many temples

of Surya, it is by no means clear that there are any of the sect peculiarly addicted to the worship of that god, even the priests in the temples of this god are all of other sects; yet Brahmans in the daily forms of prayer (*sandhya*), which they should offer for the remission of their sins, ought to pray chiefly to this god by the forms contained in the Vedas. It is said, that the Sakadwip colony introduced this worship, and in fact it is still confined to their descendants the Brahmans; but the worship of the sun, as the family or favourite deity was perhaps introduced into India by the conquests of Darius.

The images of Ganes are very common in the ruins of these districts; but I met with no temples dedicated to this god, except some Sthans, where he is called a Gram-devata; nor are there any persons belonging to the sect particularly addicted to his worship. The people of rank here pretend to reject the worship of the Gram-devatas, and in many villages there is no place dedicated to such, while men who affect to have more sense than their neighbours, when they begin to transplant rice, or on other such occasions as the Gram-devatas are worshipped, offer betle, red lead, rice, and water, and call on the name of Vishnu and Kshetrapal, who some say is the same with Vishnu, while others conclude that he is Siva; but the vulgar have never been entirely able to abandon the worship of the Gram-devatas, and imitate their ancestors either by making such offerings as before mentioned to an anonymous deity, under whose protection they suppose their village to be, or call by that name various ghosts that have become objects of worship, or various of the Hindu Devatas, such as Mahadeva, Ganes, Devi, Surya, and Hanuman. The ghosts, in fact, and the others called Gram-devatas, seem to be the gods most usually applied to in all cases of danger by all ranks, and their favour is courted by bloody sacrifices and other offerings. They are not in general represented by images, nor have they temples, but the deity is represented by a lump of clay, sometimes placed under a tree, and provided with a priest of some low tribe; but in other cases each man, when he wishes to present offerings to any of these deities, places a mass of clay in his house, and makes his own offering. I shall now mention what I have heard concerning each, having already given an account of the gods of this

kind most commonly worshipped in each division, and by each tribe. In Patna, as I have already said, the great object of this kind of worship is Pataneswari, which is properly the Gram-devata of the place; but this term is considered offensive by her priests, who are Brahmans, and say that their goddess is a form of the spouse of Siva.

The most common and general name, however, under which this spouse of the great god is here worshipped, is Bandi, of whom I have no where else heard, except in a few places of Puraniya and Bhagalpur. But here the worship is very universal, and she is câlled by all ranks the great mother (*Mahamaya*), and the highest goddess (*Parameswari*). It seems to be on this account that by the Brahmans she is admitted to be the same with the spouse of Siva, for in other respects there seems to be many differences. She is allowed to be one of five sisters; nor according to the Pandit is the name Bandi mentioned in the books, that he knows; finally she is never addressed as the favourite or family deity, and she is worshipped by all sects. Each man worships this deity in his own house. Persons of rank place a small bit of gold or silver in a plate, and call it Bandi. The poor place a lump of clay on the floor of the kitchen. A Brahman priest *(purohit)*, or the mistress of the family, repeats some prayers, and sacrifices, if they can be afforded, are offered, of such animal as the votary can eat. In this district no other female deity is a common object of worship, except as a family or favourite god, or at the usual holiday, called here the *Navaratri* or *Dasahara*, which is the same as the Durgotstab of Bengal; but here they do not celebrate this holiday with feasting, dancing, and music, nor do they make an image of clay, which after the festival is thrown into the river. There are a few temples of the Saktis, such as Jayamanggata, Siddheswari, Sitala, and Tara Devi, that have been already mentioned; but these are entirely local objects of worship, and there is not in the whole district above two or three of each. The worship of the Chut-devatas or ghosts is exceedingly common in these districts, and probably much of the worship at Gaya, if not the whole, owes its origin to this superstition, which appears to be ancient, as some of the ghosts belong to the tribes, which appear to have been long extinct in these districts.

By far the most celebrated of these objects of worship is Guriya. I have already mentioned in the account of division Sherpur the chief temple and tomb of this deity, who is there stated to have been a predatory chief of the Dosad tribe; but the worship is universal, and some other castes dispute the honour of having given birth to the robber. In some places it is alleged, that he was a Kanoj Brahman, and the Goyalas allege that he was one of their caste, who was killed by a tiger, but this seems an unjust claim to distinction, as every where the Dosads are his priests, and receive the offerings, which consist chiefly of barley meal from the pure castes, and of swine from the vile. There are few villages in these districts that have not a place (*Sthan*) dedicated to this god. To the same low tribe belong Chuharmal and Sales. Ram Thakur is a ghost, that of late years has arisen into much note. Sundar, grandfather of Raja Mitrajit, seems to have brought this deity into fashion. A Brahman went into Ramgar with this chief, and in the forests was seized by a devil, who made the good man constantly call out, that he (the devil) was Ram Thakur a Kanoj Brahman, who had been killed by some accident, and the devil at the same time commanded all the people except Brahmans to worship him, which has accordingly been done. This same Ram Thakur is a Gram-devata in Bhagalpur. He has in these districts no fixed places of worship; but when people are in tribulation, they place a branch of Tulasi in some part near the house, and offer cakes and sugar, and the low tribes sacrifice fowls and swine. He has no Pujari. Tulsivir and Barsivir, two Musahars, are in very great request, in by far the greater part of the Behar district, and next to Guriya and Ram Thakur are those most generally feared. Tilihadano was a Kol, his worship is therefore ancient. Parasuram Thakur was a Brahman, as were also Tirahultiya Thakur, Dharmadas, Balabodh, Gouhur, and Jagajivan Thakur.

Garbhakumar, mentioned in my account of Bhagalpur, is here allowed to have been a Goyala, as were also Basantakumar, Jodhakumar, Nirbhayvir, Kokilchard, and Jojhakumar. Kanudas was a boatman, as were also Jhankivir, Kayalavir, and Dayal Singha, who was killed by a witch, his mother-in-law. Some of the fishermen in Duriyapur have songs in his praise, and detailing his history. Damuvir in

some places is said to have been a Dom, in others a Goyala, but to the former low caste it is generally admitted, that there belong Harimal, Mohanvir, Yogivir, Bhikhsen, and Jouhurmal. Karuvir was a Teli or oilman, as was also Badalnayik. Barsiyadano was a palanquin bearer. Chilihadano was a person of the Kock caste, none of whom now reside in these districts. Rawaltdas was a washerman. Jagadis was a Rajput, as was also Udaravir. Pran Dhamin was a man of the low tribe called Kangjar, and Bibi is said to have been a woman of the same tribe, and is the only female ghost of which I heard. These ghosts are the spirits of persons who died by various accidents. A great part of them are said to have been killed by tigers. I at one time thought, that those called Viras might have been saints worshipped on account of their chastity, like the Virikas who have been mentioned in my account of Mysore, and I still suspect that may be the case, although the Pandit says, that they are persons who were killed in disputes. Some of these deified ghosts (*Bhut devatas*) have small temples of brick, but most of the places, where they are worshipped, consist of a small lump of clay or a stone placed under a tree, or sometimes an old image has been taken from some adjacent ruin. Some have Piyaris generally of the low caste to which they belonged; but others are attended by the Brahman of the village. A great many of the places, where the ghosts are worshipped, have attached to them a Chatiya or Bhakat, who by divine inspiration talks nonsense. In these districts such people are never of the sacred order; but some of them are military Brahmans, and I suspect it is such alone, that in Bhagalpur accept the office; for the Bhakat here at least has no reward but honour. If he is of a pure caste, he employs a Brahman Pujari to conduct the ceremonies, and this person has all the worldly gain. If the Bhakat is impure or vile, no Brahman attends, and the Piyari has all the profit. In these districts the terms Kaphi and Phuldhariya are scarcely known, the Bhakat being analogous to the first, and the Pujari to the second.

The most extraordinary of the Gram-devatas may perhaps be considered Mulek Bayo, the Muhammedan who conquered the country; but in Behar I was assured, that in the adjacent country, he is worshipped as such. The chief forms of

worship in these districts among the Hindus, besides the daily prayers offered to the favourite god, and the sacrifices made partly from fear and partly to gratify the appetite for flesh, are bathing in sacred places on certain days, and pilgrimage. In the topography have been mentioned the various places in these districts that are frequented, and the numbers that usually attend; but it must be observed, that among the people here Gaya is in very little esteem, and Rajagriha is in much greater request. The most fashionable pilgrimage here is to Harihar Chhatra in the district of Saran, at the junction of the Gandaki with the Ganges. Perhaps one quarter of the whole people in Patna go there, and many from the district of Behar do the same. To Baidyanath there may annually go 1500 persons, to Kasi 300, to Prayag 300, to Jagannath 400, to Brindaban 50, to Janakpur 400, to Kamaleswari rivers in Tirahut 1000. I am gravely assured by a Pandit, that if a person bring sand from this river, the boat, in which he attempts to cross the Ganges, will not move. The Holi here is the chief festival. The deity, to which this festival is here considered sacred, is not Krishna and Radha as in Bengal, but the goddess of Holi (Holikadevi); but who Holi is, I cannot learn. A very few Brahmans perform some religious ceremonies to this goddess; but the generality of the men, during the whole month of Phalgun, sing indecent songs, and throw red starch in the faces of all within their reach. The women of course keep as much out of the way as they can. A very few women of the sect of Vishnu in Patna celebrate the festival of Jhulan, mentioned in the account of Bhagalpur.

The Goyalas celebrate annually the day called Dewali, as is done at Bhagalpur. In the vulgar tongue this festival is here called Gaidhar, and in the Sangskrita, Gokrira. On this occasion the Goyalas tie the feet of a pig, and drive their cattle over the wretched animal until it is killed, after which they boil it in the fields, and eat it. On other occasions they do not use pork. On this occasion every rich man, who has a Goyala to tend his cattle, sends the herd to partake in the ceremony, and poor men paint their cattles' horns. The Goyalas here do not pray to their cattle, but only offer some reddle and ghiu, with which they paint their horns; but in Bengal they make various offerings, saying

accept so or so, which is a form similar to what is used towards the gods in prayer. Here it is on the day following this festival, that the Govarddhanpuja is performed, when the women of all castes pray to a mass of cowdung made in somewhat of the human form. The women call this image Jongrabongra; but the Pandits call it Govarddhan, although it is probably intended to represent Yama, and Govarddhan is a hill, not a deity. The women having made offerings to the sacred dung, distribute them among their kindred, to whom at the same time they threaten death as impending from some accident, which is considered as abuse. In Bengal on this same day the women, in imitation of Yamuna, the sister of Yama, judge of the infernal regions, put a mark of sandal on their brothers' forehead, and wish them long life, which is followed by mutual presents. It must be observed, that the Hindus very often worship (Puja) without any temple or images. In fact they seldom frequent a temple, except on peculiar holy days, or when they are afraid of some impending evil. The daily worship of their favourite god is usually performed at home; if the votary be a Brahman, before a holy stone (Salagram); or, if a Sudra, before some water in a plate. If the Ganges water can be procured, it is preferred; but any water will do. There are places, however, that are reckoned more holy than the house, and persons of more than ordinary sanctity usually frequent one or other of these. The bank of the Ganges is every where, and by all sects preferred to any other; some other rivers are reckoned holy at all times and places; but most of them are only of efficacy on certain days, and in certain parts of their course. Concerning the sanctity of other places various sects disagree. The worshippers of the Saktis and of Siva prefer the shade of the Bel tree (*Ægle marmelos*); while the sect of Vishnu prefer a place, where the Tulasi (*ocymum sanctum*) has been planted; but many of the two former sects respect also this plant. All sects consider the cow-house as holy; but on account of the smell few frequent this as a place of worship, except when commemorating their deceased ancestors. On such occasions the house is equally efficacious, whether the cattle are at home or abroad; but except the Goyalas no Hindu, of whom I have heard, ever prays to the sacred herd.

The Charakpuja is not much in use, nor did I hear of its being at all practised anywhere except in the city of Patna, and town of Gaya. It is held unlawful for the Sudras to read any book, composed by the gods or munis, but some few Kayasthas read the Bhagawatgita. The Kshatris and Vaisyas might read any book; but none, I believe, give themselves the trouble. Several Brahmans read and explain the Purans to the rich, chiefly part of the Skandha and Padma Purans, and sometimes portions of the Scribhagwat. The parts selected chiefly explain the efficacy of various religious ceremonies. The people of rank and learning have a great objection to take an oath. According to the Gayitri Tantra, I am told, it is considered as equally sinful to speak truth as falsehood, when sworn on the Ganges water, Tulasi, Salagram, cow's dung, or dust of cow's feet. Such forms should therefore be avoided, and I am told, that they would have no objection to swear on their sacred books. The custom of ordeal is never used now, except to discover thieves by giving the accused rice to chew. This is done by any leading man without orders from the magistrate, a custom that would deserve severe reprehension, did the police hold out any adequate means of safety. The sages (gurus), who instruct the Hindus, have here much less profit than the priests, who perform their ceremonis; on which account the sacred order has not been tenacious of this title, nor has it pushed the people hard; and a very large proportion of the Hindus have either no sage, or consult one who belongs to the profane orders.

The proper and military Brahmans of the Sakti and Siva sects follow chiefly the Pandits; but all other classes of these sects follow chiefly the Dasnami Sannyasis, although these pretend to have been founded by Sangkar Acharya, whose representatives in the south altogether reject the Sakti worship. None of the Pandits have extensive influence, and may be of any sect; as a person, who himself worships Rama as his favourite god, has no scruple in instructing in the proper form those who worship Siva; but in fact most of the Pandits, who act as Gurus in these districts, worship Sakti as their favourite, and are Tantriks. Some of the Dasnamis, as has been mentioned in the topography, have very numerous followers, and large endowments. One of them, Saryu

Giri of Buddhagaya, is a man of learning; but in general they are totally ignorant even of writing, of course no account of the progress of their society can be expected. Sudras are not admitted into the order; and after admission there is no distinction between Brahman, Kshatri or Vaisya. In these districts very few have married, and still fewer have become merchants. Most of those who have married, are mere farmers, and only a very few of them are received as instructors by the lower tribes. By far the greater part live on the profits of their lands and by acting as sages for such as choose to employ them, for which purpose they travel a good deal, and are strenuous mendicants. Most of them of course affect a life of mortification, but they are accused of being in private very indulgent to their sensual appetites, and perhaps the chief severity, that many of them inflict on themselves consists in long and dangerous pilgrimages. In these they no doubt occasionally suffer much; but they are urged on not only by superstition, but by the love of adventure; and, wherever they go among the Hindus, they are in general well received. Some of them told me, that they had penetrated to Hinggulada, a place on the sea-side beyond the mouth of the Indus, where there is a temple of great sanctity, but the surrounding country is occupied by Muhammedans. These unmarried Sannyasis reside in convents; and, where the head of the convent disclaims all superior authority, the house is called Math, and the superior is called Mahanta. He appoints his successor, by will, from among the Sannyasis of his convent. On the accession, a great assembly is held from all the convents near, and each Sannyasi confirms the choice of the departed Mahanta by marking the successor's forehead, and giving him presents. In return he gives a great feast. The Mahanta admits all those willing and qualified to enter into the order; and I understand, that it is not usual to refuse any person thus situated. If the person is young, the consent of the parents is usually obtained; and many parents vow to give a child to the orders. Many houses are dependent on these chief convents, and are called Sitamarai or Sitamandap, and a chief called Karobari is appointed by the Mahanta to superintend each dependency. These Karobaris are generally appointed, where some of the lands of the convent are too remote for the management of the Mahanta, or where

many people, who wish to adhere to him as their sage, reside at a great distance. In both cases the Karobari manages the affairs of his superior, and accounts for all his profits, having with him a number of Sannyasis sufficient to assist him in conducting the business. The whole property of the convent, and its dependencies, seems to be at the absolute disposal of the Mahanta, but he is bound to give food, raiment and lodging to his dependents, and entertains all travellers belonging to the order. In consequence of disputes some have left the convent, and set up houses of their own, where they receive no assistance from their Mahanta; but in general are still considered as his dependents. If however they obtain many followers and sufficient means, they may procure an assembly, which by the usual ceremonies will constitute them Mahantas. Some Karobaris also, who have distinguished themselves, have procured the title of Mahanta from an assembly of the order, without having assumed independence. Some strangers intrude on the Sannyasis of these districts, but I believe, that loss is fully compensated by those of Patna and Behar, who encroach on their neighbours of other districts.

Some few of the Kanphatta Yogis reside at Patna, and are the sages who instruct the weavers called Yogi in the worship of Siva under the name of Bhairav. Those both of the sages, and of the simpletons, who follow them, that I was able to procure, were totally illiterate, so that I shall not detail the extravagances which they related; as I am in hope of meeting with some learned man, such as many in this sect have the reputation of being. At Gaya resides a woman, who acts as a sage (Guru) for some of this sect; but I learned no particulars of her history, except that she had lived with a sage, and on his death succeeded to the office. There may be in these districts about 30 families of the Janggams belonging to this sect, of whom I have given an account in treating of Bhagalpur. Scarcely any of the Aghorpanthi reside in these districts. I heard of only three families in the division of Sahebgunj one of which belonging to a woman at Koch, who is said to instruct some people in her doctrines. The worshippers of Vishnu are divided into four schools (Sampradas) called Rudra, Sri, Brahma and Sanak; besides various routes (Panthas), by which different doctors have pointed out the way to heaven. It is generally admitted, that Sangkar

Acharya established five sects among the Hindus, whom he admitted to be orthodox, according as they worshipped Siva, Parivati, Vishnu, Ganes or Surya; but, so far as I can learn, all his followers in the south adhere to the worship of Siva, while all those in the north with whom I have met, and who have not adopted as guides some schismatic followers of the great reformer, adhere to the worship of Vishnu, and belong to the Rudra Samprada, which he founded; and it is strange, that this school of the sect of Vishnu should have adopted the name of a god, whom they do not worship. Jagannath Das, a Gaur Brahman of the school of Ramnananda, says, that the Dandis of Banaras are the Gurus of those of the Rudra Samprada, who adhere to the worship of Vishnu, as this was established by Sangkar Acharya. The Dandis consider themselves as portions of Narayan or of the supreme deity, and adopt all the extravagances of the state (Asram) called Dandi, from whence they derive their name; but do not think it necessary to have previously undergone the state of Banaprastha. They give to their disciples (Sishya or Chela) the form of prayer (*upades*) proper for worshipping any of the five great gods, that they please. This however Jagannath says, is not legal, and that the Dandis of the Rudra Samprada should only teach the form of prayer suited for the worship of Narayan. Jagannath says, that these Dandis are the same with the Gyangu mentioned by Kamalakanta of Ronggopur; while the Gokuli Gosaings are the same with his Bhagwats, and follow the doctrine of Vishnuswami. From the eight sons of this person all the Gurus of this sect are descended. The representative of the eldest son is said to live at Nathduyar in Marwar, and is much respected. He receives oblations from the whole sect; but he would not appear to have any direct authority over his kinsmen. These teach their pupils the form of prayer proper for worshipping Gopal, that is the infant Krishna. None of the Gokuli Gasaings reside here, but some occasionally come to instruct their flock, the shearings of which are not inconsiderable. They are divided into two kinds, the Sadharani, and Samarpani. The pupils of the latter ought to give up their whole worldly effects to their spiritual guides, nor will they eat nor drink with any other sect. In these degenerate days, the pupils do not absolutely give their whole means to

the sage, they are allowed to keep a little, as a nest egg. The Sadharanis will eat and drink with any person of their own caste, whatever may be his sect, nor are they so patient under the sheers of their pastors. The abode of the representative of Vishnu Swami is called a throne; and the habitations of his kinsmen are called mandirs (temples) or thakurvanis (houses of God). They worship the infant Krishna (Gopal), and reject that of Radha, who was the favourite spouse of that personage, when he reached manhood. They have very few followers east of Brindaban; but from thence to the sea at Gujjarat they have many.

By far the greater part of the sect of Vishnu in these districts belong to the Sri-samprada, founded by Ramanuj Acharya, but none adhere to the original sect as founded by that furious bigot: by far the greater part are followers of Ramananda, who, as is said by Jagannath Das above-mentioned, was not the immediate pupil of Ramanuj, as I was told in Puraniya, but studied under Vedanta Acharya, who lived in Dravira in the time of Sekundur Shah. Jagannath interprets this to mean Alexander the Great, of whom some account, he says, is given in a book written in the Hindi language, and called the Bhaktamal. It is said to have been written in the year of Sambat 1631, by Nabaji, a Vairagi, and a commentary has been composed by Priyadas, a Bengalese follower of Nityananda. This is no doubt a modern fable, as the Sekundur Shah, contemporary with Vidanta Acharya must have been one of the kings of Delhi, or Bengal, for the age of Ramanuj is well ascertained. According to Jagannath, Ramanuj was sister's son of Sangkar, the real founder of the sects now held orthodox in India, who therefore probably flourished in the 11th century of the Christian era. Between Ramanuj and Ramananda there had been a succession of five or six pupils. Ramananda was a Dravira Brahman, and not of Ayodh, as was asserted in Puraniya. Having made a pilgrimage to Badrikasram, near the source of the Ganges, his family on his return would not receive him, alleging that he had consorted with strange and impure people; on which account he settled at Kasi, relinquished female society and all other worldly pleasures, and established a new branch of the Sri-samprada. There is no difference between the terms Ramanandi and Ramawat, as I had

been previously informed; both are applicable to either Brahman or Sudra, and in general both live together and are called Avadhut; but some Brahmans affect superior purity, will not eat with the Sudras, and are called Acharyas. Both Acharyas and Avadhuts may with propriety be called Vaishnav, or Vairaya; but the Acharyas are most usually called by the former, and the Avadhuts by the latter, name. The term Vaishnav is not considered as disgraceful for a Brahman, as is the case in Bengal and in the south; but the title Gosaing, which the Brahmins of the sect of Vishnu adopt in Bengal, is considered by the followers of Ramananda as highly disgraceful, and as appropriate to the Dasnami-Sannyasis, their most bitter enemies. In some of the accounts which I have formerly given, I have to a certain degree been mistaken in calling the Ramawats followers of Ramanuj; for although they are of his school (*Samprada*), they worship Rama by forms taken from the Tantras, while those who strictly adhere to his sect worship Narayan by the forms that are to be found in the Vedas. The Ramanandis indeed will instruct their followers in the worship of any god of the side of Vishnu, such as Rama, Krishna, Nrisingha, and Bamana among the Avatars, or Narayan, and Vishnu among his heavenly forms. Although all these are considered as various forms of the same god, yet the mode of worshipping each is different; Vasudeva is considered as the same with Krishna. No separate worship is by this sect offered to the spouses of these gods; but their worship is always conjoined with that of the male, so that Krishna is never worshipped without Radha, nor Rama without Sita. Rama and Sita are, however, considered as the proper deities of this sect; and the Ramanandas have not the presumption to consider themselves as above the worship of the gods. They have Dandis; but these retain their hair and thread, and continue to worship the gods; while the Dandis who follow Sangkar shave their heads, burn their badge of honour, and, considering themselves as a portion of the deity, think that worship is quite superfluous. Some of the Ramanandas have married; but they are disgraced, and the men who have kept themselves pure will not eat with them; but they act as Gurus for the lower castes. Women, both virgins and married, may leave the world, and become Avadhutinis, and in the west the

custom is common; but here it is exceedingly rare. These females may also act as Gurus. There are no divisions among the Acharyas, and their convents are properly called Sthans, the chiefs of which are called Mahantas. In these districts there are a few Sthans of Acharyas, but they are usually confounded with the Akharas; nor have I been able to distinguish their respective numbers. The Avadhuts are divided into three kinds—Nagas, Gudar, and Brikats, vulgo Bilkat. The convents of the Avadhuts are called Alkaras; and of the Nagas there are seven Akaras or orders, all of whom carry arms, and a vast many of them are in the armies of the Rajas beyond the Yamuna. Their Mahantas act as Gurus; but the multitude go in large armed companies, partly begging, and partly forcing themselves into service, or plundering. The few settled in these districts have been obliged to abandon arms and predatory habits, and for some time their bands have not ventured to traverse the country, The Gudar dress in partly coloured clothes, and there are here very few. In these districts the Brikats are by far the most prevalent class, and are distinguished by a dress stained reddish with a kind of stone, but different from the reddle used by the Dasnamis.

Jagannath is the only Mahanta in these districts who has studied grammar, or can be called a man of learning. Some of the others can read Sangskrita, and have procured a knowledge of the meaning of a few favourite passages; but taken from these they cannot explain a word, and many cannot read, nor even understand the Bhaktamal, which is much studied. The sect seems to have no works peculiar to itself, at least Jagannath does not know them; and he says, that the proper study of the Mahantas ought to be the Ramayan of Valmiki, the Sri Bhagwat, and the Bhagawat Gita.

Few of the Akharas of the Ramawats have endowments, and none of them have large possessions. Not only the convents occupied by those who remain single are called Akharas; but the same name is given to the house occupied by those who have married. Each Akhara occupied by the unmarried is under the authority of a chief called Mahanta, who as usual appoints a successor from among his followers. None but pure Sudras are admitted into the order of Vairagis. Men of the impure or vile tribes, who wish to be

thought better than their neighbours, and who abstain from meat, fish, and spirituous liquors, are called Bhakats, but must not be confounded with the Chatiya Bhakats, who obtain reputation by being possessed by devils, who in general are strenuous drinkers, and who share largely in the flesh of sacrifices. The abstemious Bhakats belong to the sect of Vishnu, and at the recommendation of the Vairagis, who are their Gurus, have given up an indulgence of their appetites. The followers of Madhav Acharya, are called the Brahma Samprada, but do not worship the deity, from whence they derive their title. They seem to be divided into two kinds, the Dakshinadi and Uttaradi. The former, burn the mark of their god on the shoulder of their followers, a ceremony called Chakranti; and in general their sages give the form of prayer, that is suited for the worship of Rama; while the people of the north do not undergo the fire, and worship Krishna and Radha. To the former belong most of the Gayawal Brahmans, who have placed themselves under the guidance of a person, that has rejected the pleasures of the world, as is usual in the south of India, from whence he came. I know nothing farther of his history, as he declined all intercourse. He takes the title of Dandi Swami. It would have been curious to have traced the time, when the Gayawals adopted the sect of Madhav, and a knowledge of the circumstances might have led to some explanation of their history; as the origin of this sect is well known, and its date recent, that is to say written these 700 years.

The sages of the northern division (Uttaradi) of the Brahma Samprada are called Goswamis or Gosaings, and must be carefully distinguished from the Dasnami Sannyasis, who are often called by the latter name, although they are worshippers of Siva and the Saktis. On this account I usually call the followers of Vishnu, Goswamis, and the worshippers of Siva, Sannyasis, rejecting the term Gosaing as dubious, although it is in common use for both sects. The Goswamis of Bengal are the Uttaradi of the Brahma Samprada, and have not penetrated into these districts. I have not heard in these districts of any who follow the Sanak Samprada or school of Nimbak, and therefore proceed to describe the Panthas or new routes to heaven.

The Kavirs in this district have some followers, and their

Gurus take the name of Vairagi, whether they have originally been Brahmans or Sudras. Several women have taken this order, among whom is Bibekdas, born in the west in the family of a Kanojiya Brahman. She is reckoned the most intelligent person of the sect in Patna, and gives me the following information. She reads in the vulgar language, and is not at all affected in her manners. She does not even wear a veil, and visited me without hesitation. The Kavir do not give any secret form of prayer, but in its place instruct their followers in their doctrine; nor do they worship images. They reject the fire worship *(hom)*, and all sacrifices. They pray to none of the Hindu gods; but apply to Kavir alone, and conceive that he is omnipresent, and the same with Parabrahma, and that all souls are a part of the divine essence. She considers the Purans, &c. as of no authority. The proper name of their convents is Sthan, and the chief of the Sthan is properly called Sadhu, although in the country the convent is usually called Akhara, and the chief Mahanta. The Vairagis male and female never marry, and they have no Purohits. When they die they may be either buried or thrown into the river. Some married men act as Gurus, but my informant considers this as quite irregular, although some of them are alleged to be descended of Dharmadas, but these reside in Bundelkhanda. I suspect that these married men are of the Baktaha sect, for whom Bibekdas seems to profess a great adhorrence. The Kavirs have in fact divided into 12 Panthas, all on very bad terms with each other, but I have not learned the circumstances which have given rise to their schisms. The flock of the Kavirs apply to Purohits, and these pray for their employers to any gods that they please; but they are not allowed to eat or kill any thing that has life, nor to offer sacrifices. Although these Kavirs seem to differ as much as the Buddhists from the commonly received opinions, and are perhaps a remnant of that ancient sect, or at least have adopted many of its tenets, they are admitted to be orthodox *(astik)*, and are usually said to be of the sect of Vishnu; and this they do not deny, because Kavir, the master of Dharmadas, was a pupil of Ramananda. Dharmadas appears to have been a weaver, and perhaps originally a Muhammedan, from which sect he has probably borrowed several of his ideas. The hatred between the Ramanandis and Kavirs

is very bitter, nor do I know that the former and the Dasnami Sannyasis look on each other with a more pure ecclesiastic bitterness. The Ramanandis deny that Dharmadas was a pupil of Kavir, and, as the sect of the Kavir is evidently quite modern, it seems to have been in order to show that Dharmadas could not have been a pupil of Kavir, that they have invented the fable of Ramananda, the master of Kavir, having been contemporary with Alexander the Great.

In these districts another way to heaven has been pointed out by certain persons called Radha-ballabhis, because they worship as their favourite gods *(Ishtadevata)*, Radha and her spouse Krishna; but they differ from the Goswamis of Bengal, who worship the same deities, in addressing the goddess before her husband. The sages of this sect, for what reason I know not, seem to be very reserved, nor could I induce any of them to communicate an account of their order, so that what I here state is taken from Mannalal, a Brahman of another school. He says that among the Radhaballabhis no person is admitted to be a Goswami, unless he is born of the sacred order; but that every Brahman who belongs to the sect is not a Goswami; such only as act as Gurus are entitled to this appellation. These Gurus may either marry or abstain from this indulgence, as they please. The office is not strictly speaking hereditary; but the Gurus usually breed up all their sons in that line, and the profits of the flock are divided among the brothers, like any other property. The chief of the whole sect, named Bhadrilal, resides in Brindaban, and his ancestors for several generations have enjoyed the office, each assuming the title Lal, from one of the names of Krishna. The residence of this high priest is called a throne (*gudi*), while those of his dependent Goswamis are called mandirs or temples. The chief receives presents from his dependents, and may fine them for irregularities, but cannot displace them. The Goswamis give secret instruction (*upades*) to Brahmans, Kshatris, Vaisyas, and pure Sudras; but they employ no one of this latter tribe to instruct the impure, with whom they will have no connection, as the whole of their followers must live what is called a pure life, and totally abstain from all animal food or intoxicating liquor. Mannalal is not acquainted with the history of this sect; but says that it is to be found in the Bhakta-Rakhnewale, a book

written in the Hindi dialect, much intermixed however with Sangskrita. The sect is most numerous in all the country between Brindaban and Gujjarat, in which latter there are many of its adherents. The members are mostly Gaur Brahmans, Agarwala Vaisyas, and Jatwala cow-herds.

The Brahmans, who perform ceremonies, are those in these districts, who obtain most profit; and, whether they act for high or low, they are usually called Purohit Brahmans, unless by their learning they have obtained the higher title of Pandit. There are therefore none called Dasakarmas; but the title Purohit Brahman may be considered as analogous, because every man who has the least learning is called a Pandit. In some places the Purohits who can read Sangskrita, and understand it more or less, are called Pangre; while those who repeat the ceremonies by rote are called Sangre. The most essential difference, concerning Purohits, between these districts and those hitherto surveyed is, that no Brahman is here disgraced by officiating for the impure tribes, nor have any of these tribes Brahmans peculiarly degraded to act for them. Brahmans of science, however, or in easy circumstances, would scorn to pray for such scum, and in each village there is usually a Dihi Brahman, who performs the ceremonies of all the impure tribes, and such of the pure Sudras as cannot afford to employ a family Purohit. These Dihi Brahmans are usually Jausis, and are exactly analogous to the Panchangas of Karnata, described in my account of Mysore, and so called from the almanack (Pangji), which they consult. There are therefore in this district no Varna, or degraded Brahmans, nor are those at all disgraced who officiate in any temple as Pandas. The chief duty of a Purohit is to perform the ceremonies proper on 10 affairs of importance (*karmas*); at the first appearance of the catamenia in girls (*garbhadhana*), at the third month of pregnancy (*pungsabana*), at the eighth month of pregnancy (*simanta*), at one month after birth (*jatakarma*), at bestowing the name (*namakarana*), on first giving rice to the child (*annaprasana*), on the shaving the head of the child (*churakarana*), on perforating its ears (*karnabedha*), on a young Brahman's assuming the thread (*upanayana*), and on marriage (*vibaha*). The whole ceremonies used on these occasions are taken from the Vedas, and differ according to the Veda, which each man

follows; for no man in his ceremonies uses more than one of these books. In these districts by far the greater part use the Yajurveda, some use the Sama, and a very few the Rikh; but none use the Atharba. In Bengal this last is equally neglected, but the greater part use the Sama, some use the Yajur, and a few the Rikh. It must however be observed, that the Sudras cannot perform Upayanaya, because they do not wear a thread, and that it is very seldom that any one, even of the sacred order, performs the whole of the 10 affairs recommended by law. The three higher ranks usually perform Namakarana, Annaprasana, Churakarana, Upanayana, and Vibaha. The Purohits also read the funeral ceremonies, and those used at the commemoration of deceased parents, all of which also are taken from the Vedas. They also read the ceremonies which are used when their (*yajaman*) employer offers gifts to the Brahmans (*dana*) for recovering from sin, for procuring the admission of his parents into heaven, or for honouring his god (*Ishtadevata*). The ceremonies which accompany gifts to the Brahmans on the two first occasions are taken from the Vedas. Those which accompany the offerings made in honour of the gods, in both Bengal and Behar, are taken from the Tantras. The Purohit sometimes also reads prayers for his employer at places of pilgrimage, on the holiday at any temple, or when his employer is in danger, and applies to any god for assistance; but these ceremonies are most usually performed by the priest attached to the place of worship, unless the priest is of a low caste, and the votary is a Brahman. The ceremonies used on these occasions are mostly taken from the Purans, but some are contained in the Tantras, and a few in the Vedas. Many bloody sacrifices are performed without the assistance of a priest of any kind, either Purohit or Pujari. In the Vedas are given forms for the sacrifice of men, bulls, and horses, and in the Tantras are forms for the human sacrifices; but all such offerings are now considered illegal; and it must be remarked, that of the five deities, Sakti, Siva, Vishnu, Surya, and Ganes, to whose worship Sangkar restricted the orthodox, the first alone can be appeased by blood. It must be indeed allowed that Bhairav, usually considered as a form of Siva, receives sacrifices; but it is alleged, that this is only legal when he is considered as a Gram-devata. The whole of the

10 Karmis are accompanied by burnt-offerings (*hom*), as directed in the Vedas. According to these books, these burnt-offerings might be made of animals; but in these districts all the burnt-offerings are of inanimate matter. Burnt-offerings are also directed in the Purans and Tantras; but in these districts this ceremony is now very seldom, if ever used, either in the worship of the favourite or other gods, except at the Durga-Puja, which happens once a year.

The only Brahmans who have here suffered degradation are the Kantahas or Mahapatras, who take the offerings made, when children for the first time perform the ceremonies in commemoration of their deceased parents. They are quite ignorant, and may amount to 300 families. They neither can read nor repeat the ceremonies, necessary at funerals, and in these districts every Sudras Purohit reads these without disgrace, which by my Bengalese was at first considered incredible, and always held by them as abominable, and therefore they considered all the Brahmans in Magadha as Maruiporas; but there no such title is known. No Sudra will drink the water touched by a Kantaha; still, however, it is much more sinful to kill one of them than to kill a king; although, in comparison with a Pandit, the death of a Kantaha is a mere trifle. The death of a Kantaha and that of a military Brahman are considered as about nearly equal, both by performing low offices having become inefficient, and the word used to express this (*patit*) is that applied to land which is uncultivated.

Brahmans, before they assume the thread, which is their badge of distinction, pass only one day in the exercises of Brahmachari, which consist in living pure, that is the young man eats rice and milk, rubs himself with turmeric and oil, and then bathes. If he is able, he reads some forms of prayer; and if he is not able, he repeats them after some person who can read. To such a low ebb are reduced the studies considered necessary for admission into the sacred order, since it has become hereditary. In former times there seem to have been required long studies, and penances. At Patna is one man, who, although he has long ago taken the thread, and is married, calls himself a Brahmachari, and on the strength of this, and much grimace and affectation of penance and sanctity, although he is a very ignorant fel-

low, procures a good deal of money, being a most impudent beggar. He is a native of Bengal. A Mahratta Brahman, who has taken the thread, but whose history is unknown, because he observes an entire silence, is also called a Brahmachari, and has placed himself in the most public market at Patna. He has several attendants of the sacred order, who beg for him, and minister to his wants. They say, that he has vowed silence for 12 years. He issues his orders in writing, and can therefore write, and he appears occasionally to read, having some few books; but in all probability they are merely devotional.

No Brahmans of this district have become hermits (*Banaprasthas*); nor have any gone to Benares to take upon themselves the severe rules of Dandi; although, as has been mentioned, several such persons visit this district, and are followed as sages by a good many very wealthy persons, especially among the Gayawals, their unmarried Guru being of this order. These Dandis seem to be analogous to the Sannyasis of the south of India, who must by no means be confounded with the ignorant fellows here so called; but the Dandis here would neither seem to possess the learning nor authority of those that are in the south. In this, however, I may be mistaken, as I suspect, that several impostors assume the name, which they have disgraced. I had no opportunity of conversing with any of them. One man, who has adopted the extravagance of a Gymnosophist (Paramhangsa), resides occasionally with the Bramachari of Bengal before mentioned, a companion worthy of his folly. He very seldom speaks, so that the Pandit of the survey cannot discover whether or not he has any science. The silence probably, however, is very prudential. He is not a native of these districts.

At Rajagriha, a hermit of the kind called *Tapasya*, or penitent, has seated himself in an open gallery in front of a thatched hut. He sits all day in the posture, in which the Buddhas and Tirthangkars of the sect of Jain are represented, and is well besmeared with the ashes of cow dung. He neither moves nor speaks, and those, who choose, give him alms. If on any day he receives nothing, he fasts; for he never lays up for to-morrow, and whatever is superfluous he gives to the poor. He was one of the most humiliating

objects that I have ever beheld. It was alleged by the people round, that some thieves had stolen his blanket; but I suspected, that this was a mere fetch to procure a rupee, as to their utter astonishment I had not given him any thing. It seems scarcely credible, that any thief should have stolen from such an animal, who, besides his wretchedness, was supposed by all classes to enjoy a large proportion of divine favour. A few women who have dedicated themselves to God, are called Avadhutinis, and live by begging, but I do not know their history farther than has been already mentioned. With regard to their manner of life, and the respect which they obtain, they seem to be much on the same footing as the Dasnami Sannyasis. Two or three other women have set up as sages (Gurus) to instruct mankind, and have been submitted to as heirs of their husbands, who previously filled the office. All those called Brahmans, for the determination of offences against the rules of caste, are divided into associations called Samuha. None of the lower castes are admitted into these Samuhas, and each division of the Brahmans has its peculiar associations. All the members of each Samuha are equal, no Brahman willingly admitting any superior. No fines are exacted, but an entertainment is given by the guilty person, if he is again received into society. The lower tribes have similar associations called Chatais, because no one accused of any impropriety is allowed to sit on the same mat with the society, until his character has been cleared. The Kayasthas and superior castes do not admit the authority of chiefs, and all the members of each Chatai are equal; but the lower tribes have hereditary chiefs, some of whom are called Manjan, some Gorha, some Mahato, and some Mehturs. Fortunately for this district the authority of these persons is confined to matters of caste alone, nor in general have they been allowed to interfere in ordinary affairs; but in towns several trades, especially carters, boatmen, and palanquin bearers, are under the control of Chaudhuris, or Majhis, who enable them to fleece travellers. They pretend to have orders from the judge or collector, and with proper regulations such offices might no doubt be highly advantageous. The hereditary chiefs exact fines for transgressions contrary to caste. Out of the fine, if it is large, a present is made to the owner of the village or his agent; and the re-

mainder, or in trifling cases the whole, is spent in a feast. Here there are no Bariks, such as are described in the account of Bhagalpur. If a beast of the sacred kind is killed by accident, the expiation is left entirely to the conscience of the owner, who sometimes performs a short pilgrimage; but if the animal has died tied to the stake, or if it dies after being fired with an intention to cure it of disease, or if a person strikes the animal and it dies, the culprit is taken before a Brahman called a Laheri, who determines the nature of the expiation to be performed. There are several of these Laheris, but by whom appointed I know not. In some cases I know the office is hereditary, and has an endowment annexed.

Of several small sects.—For the sake of preserving uniformity with the accounts of the districts formerly surveyed, I here treat of the Sikhs, although this sect is considerably more numerous than any one of the five that since the time of Sangkar Acharya have been usually considered orthodox; but, although the Sikhs altogether reject the Brahmans as their sages, and receive no secret form of prayer, by which they can daily address one or other of the five great divinities of the Hindus, still they are admitted to be orthodox (*Astik*), for which I have not heard anything like reason assigned, farther than that the Jain and Buddhists were condemned by Sangkar and Udayan, two great luminaries of the Hindu law, and that since the rise of the Sikhs no person of such authority has appeared. The real reason is perhaps, that the office of Guru, in the parts where the Sikhs prevail, is of little importance, and the successors of Nanak have allowed the Brahmans to remain in the full enjoyment of the Purohit's office, although this seems to have been done rather as a matter of prudence, or as an indulgence to weak consciences, than as a thing enjoined, or perhaps even allowed by the founder of the sect. Although I have not seen the account of this sect, that has been lately published in the Asiatick Researches, I suppose, that it enters fully into all the details necessary on the subject. I shall therefore avoid long discussions, and mention chiefly the substance of what was said by Govinda Das, chief of a bang or division of the sect, and who presides over 360 gudis or thrones, that is to say a considerable but indefinite number of places, where there is a

seat called a throne for his reception. He usually resides at Rekabgunj in the suburbs of Patna, and is a middle aged man, free from hypocritical cant, or the affectation of austerity; but does not appear to have any learning, and is exceedingly tiresome from repeating many Pauranik legends. He calls himself a Fakir, and acknowledges, that at Lucknow and Moorshedabad there are two persons of equal rank to himself; but denies, that this dignity is due to the persons in this district and in Shahabad, who claim the honour of independence, and the former of whom have been enumerated in the topography, as persons possessed of jurisdiction. The Fakirs of the Kholasah sect of Sikhs admit into their own order only Brahmans, Kshatriyas and Vaisyas; but among their followers they admit all Hindus, who are not vile; and they entirely exclude all Mlechchhas, such as Muhammedans or Christians. The Fakir like many other Hindus admits, that there is only one supreme God (Parameswara), but he asserts, that no one even of the inferior deities knows his name, nor anything of what he does, and that he gives himself no sort of trouble about human affairs; yet he thinks, that he ought to be the only object of worship. He allows, that Vishnu, Brahma and Siva are gods (Iswara), and he occasionally makes them offerings; but he says, that he does so merely in compliance with the custom of the country. The Sikhs, as I have said, have no secret form of prayer; but their sages (Guru) instruct them in a short creed, like that of the Muhammedans, and this they are taught to repeat. They have also four forms of prayer, for four different times of the day; and, when any person gives an entertainment, or make offerings at the house of meeting (Sanggat or Dharmasala), one or more of these forms are repeated, according to the time or times when the offering is made. A person of any religion may partake of these entertainments; but an infidel is not considered as at all converted by such participation, nor would a Sikh admit any such person to eat in his house. The Fakirs sometimes marry; but this is considered as disgraceful. All Fakirs, whatever their caste may be, eat together, and in order to satisfy the consciences of the purer tribes, all abstain from many kinds of food and drink. The Fakirs ought to give up all connection with the Brahmans; but many in compliance with custom employ Purohits to perform their cere-

monies. The Sikhs, who are not admitted into the order of Fakirs, follow exactly the same customs, that they did before their admission. They observe the same rules of caste, employ the same Brahmans as Purohits in every ceremony, and in all cases of danger worship exactly the same gods; they abandon only the daily worship of the family god (Kuladevata).

Nanak had two sons, from whom are descended 1,400 families called Shahzadahs, who are much respected, and reside at Dera in the Punjab, where they seem to be dedicated to religion, and to live on its profits. Nanak appointed as his successor a pupil named Ungat, who was followed by Amardas, Ramdas, Arjunji, Aaragovinda, Hararay, Harekrishna, Tekbahadur, and Govinda, who was born at Patna. The Muhammedans began now to persecute this sect, and the Sikhs had recourse to arms. Govinda does not seem ever to have become a warrior; but he appointed four generals, who were not only soldiers but priests. Since his time there has been no general head of the sect, and it has divided into two branches; the Khalesahs, who are of the church militant, and who usually as such assume the title of Singha or Lion; and the Kholasahs, who confine themselves entirely to spirituals, and are commonly called Sikhs, the original name of the sect, when it still entirely confined itself to the instruction of the people in the proper worship of God. In the Punjab the Khalesahs prevail, and every Raja in his own dominions is considered as the head of both church and state; and they have become violent persecutors. Govinda Das seeming to know little of this branch of the sect, and there being scarcely any, of them here, I shall say nothing farther concerning the Singhas, than that the Harimandir in Patna, where Govinda the last universal head of the sect was born, although held sacred by the whole sect is in possession of the Singhas. A Dayal Singha with three assistants reside at it, and have the profits arising from offerings; but the place has of late been seldom frequented, the conduct of Dayal Singha, and his assistants having given scandal to the sect; nor in the whole of these two districts has this person one dependent Gudi or Sanggat. Govinda Das considers him as a person of no authority, and as a mere keeper of the sacred place. In the Kholasah sect the Fakirs or spiritual guides, who are entitled

to sit on a throne (gudi), are called Mahanta, and ride on horseback, preceded by a flag and drums (Nakarah). The Fakirs, who depend on the above, and have charge of meeting-houses (Sanggats or Dharmasalas), are called Balakas. These also act as spiritual guides, and the nature of their dependance has been explained in my account of Puraniya. The assemblies at the Sanggats are quite irregular, and depend entirely upon the accidental offerings, that are made. Even at Rekabgunj, by far the greatest place of worship in these countries, there are not now four daily assemblies; but it is said, that formerly these meetings were regular, and, when no offering was made by any of the laymen, the Mahanta defrayed the expense; but Govinda Das considers this as unnecessary, and no meeting takes place, but when some person makes an offering. These however are frequent, and sometimes more than four occur on the same day, but all are given at the four regular times.

The followers of Sivanarayan called Santas, and mentioned in my account of Bhagalpur, have in these districts made little or no progress; but lately a man of Daudnagar made some noise, and obtained the title of Santa, although I found that he himself disclaimed the distinction; and he seems to have been alarmed, whether in consequence of any threats I do not know, as unfortunately the man seemed to think me averse to his cause. He is a merchant of the Khatri tribe, and is named Bastiram. I am told that he leads what is called a holy life, has read sundry legends in the profane languages, and talks much to his neighbours on religious subjects. He says to them, that he is of the sect of Vishnu, but constantly expatiates on the doctrine of an immaterial Supreme Being (Nirakar Parabrahma). It is alleged that he declares Dana, that is charity given to Brahmans for procuring a remission of sin, to be not only an useless expenditure of worldly means, but that in a future life it will prove rather prejudicial. His son, who visited me, denied this damnable heresy; but it seems to me that he teaches some doctrine which he knows is looked upon as dangerous; for when I wished the father to visit me, he pretended to be sick, and when I offered to visit him, he sent his son to inform me in a civil manner that he must be excused. In these districts the Jain are called Srawak. The number of this sect settled here is not great,

amounting to about 350 families; but they possess considerable wealth, having all engaged in trade, and many of them with success. They have, therefore, 17 priests (Yatis), who constantly reside, 15 at Patna, and 2 at Behar. With the two latter I had several interviews, and they were very communicative, the chief of them being a man of considerable learning. At Patna they declined all intercourse, which, I am told, proceeded from their being very shallow, and afraid of exposing their ignorance. A Saryuriya Brahman of the sect of Vishnu, named Govinda, was brought to me at Patna, as the only person there able and willing to give me information on the subject; and he says, that he has been employed to instruct some of the Yatis in the Sangskrita language, which gave him an opportunity of reading their books and knowing their customs. Finding the business profitable, I believe he was a principal means of keeping the Yotis at a distance; but he was abundantly diligent in procuring information. In travelling through the district, I had also an opportunity of conversing with a great many pilgrims, who were visiting the holy places mentioned in the topography, and who had come from Bundelkhanda. From these sources I collected some information respecting this sect, which I now offer in addition to that, which I have given in my account of Mysore. The circumstance by which I am most surprised is, that here the hereditary division into the four common tribes of Brahman, Kshatri, Vaisya and Sudra is totally denied, although these names are considered among them as denoting distinctions of employment and rank. All the laity here are, therefore, called Vaisyas, because they all trade; but they assured me, that in the west of India a great many of them are called Sudras, because they cultivate the land or tend herds of cattle; while others are called Kshatris, because they carry arms; and they assert, that a large proportion of the Rajputs in Jaynagar, Bundela, Mewar, Marwar, Khandhar, Lahaur, Bikaner, Jodhpur, &c., are of their religion, and that the princes of the first-mentioned place continued Jain, until the time of Pratap, the son of Seway-Jaysingha, who became a worshipper of Vishnu, and received Upades from the Brahmans. None of the persons with whom I have met in these districts had ever heard of any Brahmans belonging to the Jain, except those who will be

afterwards mentioned as forming two kinds of priesthoods, rather connected however with the sect than belonging to it. There is, therefore, great reason to suspect that the proper doctrine of caste, or at least of four castes, similar to those which the orthodox Hindus suppose to have originally existed, is an innovation among the Jain, although in the south of India it seems now completely adopted in compliance with the prevailing opinions; for in Karnata none will admit that they are Sudras, the rank being too low, while it is evident that no people could have subsisted without by far the greater part being labourers; and it is no less evident that Karnata was once inhabited by a people chiefly, if not entirely, of the Jain religion. Although the distinction of Brahman Kshatri, Vaisya and Sudra has not taken place among the Jain of these districts, nor of Bundela, they are subdivided into tribes, which they call Jat or castes; and no person of one tribe can marry one of another; nor will they eat together boiled rice or bread. These tribes are said to be numerous, and I met with no one who pretended to know the whole that may exist in India; but I heard of the following:—Osawal, Pariwal, Puriwal, Paliwal, Kariwal, Agarwal, Yasawal, Srimal, Srisrimal, Karawal, Barawal, Golsingha, Gujjawal, Bagherwal, and Golilal. All the pilgrims from Bundela were of the Pariwal tribe. In these districts most are Osawal and Agarwal, that is, the original inhabitants of Agra; but it must be observed, that by far the greater part of the Agarwals have been converted to the sect of Vishnu, and are admitted to be of the Vaisya caste, which distinction is also conceded to those who adhere to the sect of the Jinas.

The Jain seem long to have been divided into two sects, the Swetambar and Digambar; but of late, as among the orthodox, schisms have arisen, and sundry people have pretended to find new ways to heaven by what are called the Terepanthi and Bispanthi, that is, the 13 and 20 roads; while others called Duriyas have separated still farther from former opinions. The Digambars are also called Bhattarakas. Of these there are scarcely any in this district; nor were there any among the pilgrims with whom I conversed. I believe, however, that in the south the Digambars are the most prevalent. The Digambars, or at least their priests, ought to go naked; but, if those I saw in the south belonged

to this sect, as I believe was the case, they have given up this absurdity; and even Pandita Acharya, who had obtained *Nirhan*, or divinity, was as decently clothed as an ordinary man. What convinces me that it was the Digambar with whom I met in the south is, that this sect has 24 books, called Purans, as mentioned in my account of Mysore. The names of these books are:—Adipuran or Chakradhar P., Ajil P., Sambhav P., Abhinandan P., Saumati P., Padma-Prabhava P., Sauparsa P., Chandra-Prabhava P., Saubad-hinathiya P., Saitalnathiya P., Sriyangsanathiya P., Vasu-pujya P., Bimalnathiya P., Anantathiya P., Dharmanathiya P., Santinathiya P., Kunthunathiya P., Armallanathiya P., Munisubratanathiya P., Naminathiya P., Nemnathiya P., Parsanathiya P., Mahavira P., and Uttara P. These books, so far as I can learn, give an account of the 24 Tirthangkars, or law-givers of the sect; the first 23 giving each an account of one such person, while the Uttara Puran gives an account of the whole. The sect of Digambar in performing its ceremonies is said to be guided by books called Siddhanta, which form its code of Agam. The books are—Trailokyasar, Gomatsar, Pungjaraj, Trailokyadipak, Kshepanasar, Siddhantasar, Tribhanggisar, and Shatpawar.

Many of these Purans and Siddhantas are attributed to Gautama, or other chief rulers of the (*Ganadar*) of the sect, who are supposed to relate what was said by the Firthangkars, or law-givers.

Besides these books the Digambars have other books, called Charitras, composed by inferior personages. These are Yasodhar Charitra, Sripal Ch., Hanumant Ch., Sita Ch., Bhadrubahu Ch., Jambuswami Ch., and Pradyumna Ch. The Swetambar have always held the Gymnosophists in the contempt due to their extravagance. So far as is here known, they are divided into 84 Gachh, each of which is under the authority, in spirituals, of a priest called Sripujya; but every person seems to be at liberty to join whatever Gachh he chooses. The Sripujya is the Guru or spiritual guide of the Gachh, and as such, as usual among Hindus of all sects, is worshipped by his followers; but whether or not he is exactly of the same rank with Pandita Acharya, whom I have mentioned in my account of Mysore, I cannot ascertain. The Sripujya is always by birth a Srawak, and renounces all

worldly pleasure. He educates a number of pupils in the same strict manner, and is succeeded by one of these, when he is translated to heaven. None of the Sripujyas would appear to reside farther east than Gwalyor. They seem to have each an abode, which may be considered as their head quarters; but they pass a great part of their time in visiting their own flocks. Although it is for these alone that they perform the offices of delivering secret instruction (*Upades*), of distributing consecrated ashes, and of reading the book called Pritikrama; yet, wherever they go, they are received by the whole sect with the utmost respect, and in all the principal places which they frequent, houses called Pausal have been built for their accommodation. The Sripujyas, and their immediate pupils, I understand, in general possess some learning. The people of each Gachh are so scattered, that the Sripujyas have found it necessary to appoint assistants, who may act as deputies to perform the above-mentioned ceremonies, and to manage the temporal concerns of the Sripujya. These assistants are the only persons, who in these districts are called Yatis, although it would appear from Colonel Mackenzie's account, that in the south the term is considered applicable to the whole priesthood. The Yatis are of the order of Mahabrata, described in the Asiatic Researches, by Colonel Mackensie, and ought to observe with the utmost strictness the five great virtues of the Jain law. 1. Pranathipat, respect for the life of all creatures. 2d. Mrishabad, truth. 3d. Adutadhan, honesty. 4th. Maithan, chastity. 5th. Poriga, poverty; while they have no expectation of being elevated to the high dignity of Sripujya. On this account it seems to be difficult to find persons willing to fill the office, so that children are usually purchased for the purpose, and among these the Srawaks are willing to take the children of Brahmans. The two Yatis at Behar had originally been of this order; and being still suspected of a hankering after the flesh-pots were far from respected, although one of them, as I have said, was a man of very considerable learning and good manners, qualifications which, I am told, are very uncommon in this order of priesthood. These Yatis are the mere agents of the Sripujyas, and according to their industry in performing their duty, and especially in remitting contributions to the sage on whom they

depend, are entrusted with the care of a larger or smaller portion of his flock, being removable at his pleasure from any one place to another. The Yatis usually reside at one of the places *(pausal)* built for their masters' accommodation, and each has usually a pupil whom he educates to be his successor. If he dies without having educated a successor, the Sripujya is his heir, and sends a new Yati to take charge of the office. In general the Yatis can read Sangskrita, but few of them understand much of that language.

Some holy men, called Sanbegis, make occasional visits to these districts. They accept of nothing but what is absolutely necessary for each day's daily subsistence, and are supposed literally to take no care for tomorrow. The Srawaks of the Swetambar sect would appear to have no proper Purohits, or priests for conducting their ceremonies; each man worships the gods for himself, and makes his offering; nor on such occasions is any priest necessary to read prayers. Among them, however, has arisen an order of Brahmans, called Bhajaks (*eating*), or Pushkar (*flower-priests*), who attend at their temples, and take the offerings, and on that account are usually called their Purohits, although they are never employed to read prayers. The account usually given is, that between two and three centuries ago, the sect having undergone persecution, these Brahmans took arms in their defence, and have ever since been allowed to have charge of the temples, to receive the offerings, and to supply those who came to worship with turmeric, red lead, and some other articles usually employed. All the Bhajaks that I have seen adhered to the orthodox faith. The same may be said of the garland-makers (*mali*), of whom one is usually attached to each temple, in order to keep it clean, and to supply votaries with flowers. The Srawaks of the Swetambar sect seem indeed to have little occasion for Purohits, as of what are called the ten actions, (Dasakarma) required by the orthodox, marriage alone is here accompanied by any religious ceremony, and any Brahman is employed by the Srawaks to read the ceremony usual on such occasions. The reason of this seems to be, that the ceremony being universal among their neighbours, the Srawaks are afraid, least without it the contract might not be considered valid. In the south it would appear from Major Mackensie's account, that

the Jain attend to the performance of all these ten religious actions, and also to the ceremony of initiation (Upanayana), which the Srawaks here entirely neglect. All the Srawaks here ought to be Anabratas, which order requires their observing the five great virtues lately mentioned, as far as consistent with the existence of society; for what I have called chastity, is a total abstinence, and poverty implies the total neglect of worldly concerns; and these rules observed with rigour, it is evident, are incompatible with the existence of society. The Srawaks worship their 24 great teachers, usually here called Avatars, although Tirthangkar seems to be the most proper name; and also some of their most celebrated disciples, among whom 11 attendants on Mahavira are the most conspicuous; but of these Gautama is by far the most eminent, and seems to be as remarkable here as Gometrai is in the south. Mr. Colebrooke in his treatise on the Jain, published in the Asiatick Researches says, that this person is only called Gautama on account of his being descended from that person, and such may be the case; but the Yati at Behar, and Govinda of Patna assured me, that they consider the disciple of Mahavira as the son of Mayadevi, and as the author of the Indian Metaphysics. In their temples they have images of all these persons, which they worship; but their devotions are more usually addressed to what are called the representations of their feet. The places where all these personages were begotten (Garbha), where they were born (Janma), where they resigned worldly pleasures (Dikshya), where they began to meditate (Gyangr), and where they departed from this world (Nirban), and are considered holy, and are frequented by pilgrims, and many such have been mentioned in the topography. All the 24 Tirthangkars are said to have been sons of kings, except Nemnath, and he was of the royal family of the moon, being descended from Jadu, the ancestor of Krishna. Vasupujya another of these Tirthangkars, died at Champanagar in the reign of Raja Dadhibahan, who lived after Karna. These circumstances connected with the reforms of the Pauranik chronology given by Major Wilford and Mr. Bentley, will serve in some measure to show, what reductions will be necessary on the extravagance of Jain chronology. The Yati of Behar says, that the best account of their Avatars and kings is to be

found in a book called the Bhagawatsutra consisting of 45,000 couplets (*sloka*), and that the best account of their places of pilgrimage is called the Tara Tambul. Much historical matter is said also to be contained in their Purans totally different from the books of the orthodox called by these names, although both have probably been derived from some common original, now lost. I am assured by Govinda, that the Srawaks here frequently study the same Purans with the orthodox Hindus, *viz.* Ambhoruha, Vishnu, Vayu, Bhagawanta, Narada, Markandeya, Agnidaivata, Bhavishya, Brahmabaibarta, Lingga, Varaha, Skandha, Bamana, Matsya, Kurma, Garura, Brahma, and Itihasa. The Swetambar also acknowledge the laws (*smriti*) of the 20 Munis of the orthodox, who have already been mentioned, and place these sages in the same succession. The Swetambar have no less than 45, or as some allege 34 Siddhantas or Agams for the direction of their worship, but they seem to contain much extraneous matter. Among these are the Thananggi Sutra, the Gyangnti Sutra, the Sugoranggi Sutra, the Upasakadesa, the Mahapandanna, the Nandi Sutra, the Pandanna, the Rayapseni, the Jivabhigam, the Jambudwippannatti, the Surapannatti, the Chandrasagarpannatti, the Kalpa Sutra, the Katantrabibhrama Sutra, the Shashthi Sutra, and the Sanggrahani Sutra.

The temples of the Srawaks are here called Deohara. In many of them Bhairav is an object of worship. The Srawaks look on him as a minister of the gods, and he is represented by a mass of clay usually placed under a shed. The Srawaks here worship no less than 48 female deities, among whom are Padmawati, Chakreswari, Chandrakantha, Srimaline, &c. but I have learned nothing of their history, nor did I see any of their images. The Srawaks also worship Kshetrapal, the god of cities like the Gram-devata of the vulgar. In this district the Srawak do not usually worship any of the gods (*Devatas*) adored by ordinary Hindus, such as Rama, Krishna, Siva, Kali, &c. but when afraid of any great impending evil, and when they think, that they have failed in procuring relief from their own gods, they sometimes, just like the Moslems, have resource to whatever idols may be fashionable, and employ a Brahman to perform the ceremonies. They admit the sun and heavenly bodies to

be deities, but do not consider them proper objects of worship. The Srawaks do not themselves perform Hom, that is they do not make burnt offerings, and they abhor animal sacrifices; and put themselves to the most extreme inconvenience in order to avoid killing, by any accident, even the most minute reptile; but when afraid of any misfortune, they employ a Brahman to make the offering called Hom. This seems, however, to be a superstition crept in among them from their neighbours, just like the worship of the gods of the orthodox Hindus. Besides the Digambar and Swetambar, as already mentioned, three sects, called Terepanthi, Bispanthi, and Duriyas seem to have lately arisen among the Jain, a proof, that they are now freed from the terrors of persecution. The Terepanthis and Bispanthis are so few in number, that I have not been able to learn the differences of opinion, on account of which they have separated from each other; but both agree in rejecting the advice of the sages (*Gurus*), who are spiritual guides for the two old sects of the Jain; nor have they adopted any other persons to perform this important office. This is a heresy so damnable, that they are beheld with the abhorrence due to the heterodox (*Nastik*), while the Swetambar in the west of India, and even in Patna, from their weight in the state, are at present admitted by the Brahmans to be orthodox (*Astik*). These two heterodox sects worship the 24 Avatars, and perform other religious rites as usual, practices which are entirely condemned by the people called Duriyas, all of whom are said to consider themselves as having obtained divinity, and therefore as exempted from the worship of any god. This extravagance, however, has not been accompanied by the system of rejecting the advice of sages (Gurus), and therefore, although considered as heterodox (Nastik), they are thought less dangerous than the other two schisms, especially as their sages are ascetics of the most extravagant mortification, who wander about thoughtless of all worldly concerns, and covered with rags and nastiness. The Roman Catholics, consisting of about 20 families of native Portuguese, have a church in Patna; and there are three or four Armenian families.

EXPLANATION OF THE PLATES OF BEHAR AND PATNA, IN THIS CHAPTER.

PLATE I.—Is a plan of Patna City, drawn by a native.

PLATE II, Page 57.—Contains three figures:—No. 1, p. 58, line 24. No. 2, described at p. 57, line 21. No. 2, p. 57, last line.

PLATE III.—Four figures, p. 59, line 24,

PLATE IV. p. 60.—No. I, p. 62, line 13. No. II, p. 61, Image said to represent Ramchandra, but it has none of the emblems by which the orthodox distinguish that object of worship; it has on each side the Lion of Gautama. From the area around Gadadhar. No. 3, Gadadhar.

PLATE V.—Four figures:—No. 1, p. 62, last line. No. 2, a very strange old image near the impression of Vishnu's feet, in the sacred *Mandir* at Vishnupad. No. 3. found in the ruins of Vishnupad. N.B. Three figures are here represented with exactly the same emblems, which is contrary to Hindoo Orthodoxy.

PLATE VI, p. 65.—The description is given on the plate.

PLATE VII, face p. 67.—Images found near the temple at Koch.

PLATE VIII, p. 68.—No. 1, p. 68, line 23. No. 2, line 20.

PLATE IX, p. 72.—Images representing the female destructive spirits, with many arms or heads, human and bestial, and clothed with terror: from Buddha-Gaya. Images found at Buddha-Gaya. Male destructive powers of a hideous aspect, denoted to be under the direction of the Buddhas, by having images of Buddh on their heads. One has a resemblance to the Yama of the orthodox: from Buddha-Gaya.

PLATE X, p. 74.—No. 1, p. 74, line 2. No. 2, p. 73, line 14. No. 3, p. 75, line 8. No. 4, p. 75, line 13. No. 5, p. 73, line 18. No. 6, p. 75, line 29.

PLATE XI, p. 79.—No. 1, A stone-like altar, of which the four faces are represented in the plate; it is from the ruins of Kanyadol, near the Barabar hills. These works are usually attributed to the Cheros. No. 2, Image found (among others) scattered about in the area of the temple of Krishna Dwarika, in the town of Gaya; see p. 68. No. 3, Hara Gauri, or Gauri Sangkar. One of the most usual images in any part of Behar, especially at Buddha-Gaya and Baragaug. The male rests his foot on a bull, the female places hers on a lion. Dr. Buchanan supposes the image to represent Semiramis and Belus, or Isis and Osiris. This plate was drawn from a figure found amidst many broken and defaced images near some antique ruins at Narawat, in the north-east corner of the district. No. 4, A female deity, with four arms, holding a sword and buckler, and sitting on a lion *couchant*, without any thing hideous in her aspect or emblems. Found among fragments and ruins near Tapabanpoolo, in the division of Nawada. No. 5, The deity Ganes, or Ganesa, as usually represented in the temples of the Buddhas,—from Giriyak ruins.

PLATE XII, p. 86.—No. 1, Varaha, from the sacred pools round Brahmakunda, near Rajagriha. No. 2, Image called Surya, (differing from those at Suryakunda,) from the temple of Varaha. Nos. 3 and 4, Images usually called *Devi*, but probably designed to represent a Prince and Princess. Found in a reservoir at the Markandiya spring, near a temple of Siva, on the west from the temple of Varaha.

PLATE XIII, p. 92.—Image of a Buddh, supporting, by a cloud proceeding from his head, a female laid on a bier, and surrounded by mourners. A promiscuous assemblage of Buddhas, gods, goddesses, demons, dancers, princes, beasts, and monsters, surround the chief figure, which is an object of worship. It was found near the vast ruins of Kundilpur, (Behar division,) beside a fallen temple, called *Yagnespur*, or the Lord of the feast. It is supposed to be a funeral monument.

PLATE XIV, p. 95.—Nos. 1 and 2, Buddhs, in the usual sitting posture, but differing in some particulars from other figures of Buddh. From the ruins of Baragang palace. No. 2, Many armed goddesses, from ditto. No. 4, Female image, with two arms and two attendants, standing under two Buddhas. No. 5, Buddha Sen, or general of the Buddhas, from a ruined temple of the Buddhists at Kanyados. Image of Colossal size, made of fine indurated potstone and carved with many figures of Hindu legend. No. 6, A Buddha, called Batuk *Bairav*, and worshipped as such; it is of colossal size, the figure as usual seated on a throne adorned with 3 lions and 2 votaries. From the ruins of Baragang palace. No. 7, A figure of a female with two arms sitting on a throne, supported by lions, in Kapteswari temple, Baragang. No. 8, An image of Buddh, apparantly monumental, taken from a small temple of Siva, south west from Suryabunda.

PLATE XV. p. 96.—No. 1, A large image lying a little way south from the temple of Bairow, amidst the mass of ruins near Baragang. It represents a female with two arms, brandishing something like a thunder-bolt, and trampling on a prostrate warrior. An attendant holds over her an umbrella, the emblem of royalty. No. 2, p. 96, line 22. No. 3, Image in the streets of Baragang, said to represent Brahma. No. 4, A most remarkable female image, with four arms, sitting on a lion, and tearing the tongues from two male captives. From Kapteswari temple, near Baragang.

PLATE XVI. p. 99. p. 98, Nos. 2 and 3, lines 4 and 5. No. 1, Image resembling Gaurisangkar, but beneath is a bull instead of a crocodile, quite different from the usual figures of that name. From a temple dedicated to Jagadaruba, 4 coss south from Helsa. Nos. 4, 5, 6 and 7, p. 99, lines 4 to 20.

CHAPTER V.

NATURAL PRODUCTIONS OF THE DISTRICTS OF BEHAR AND PATNA, INCLUDING THE ANIMALS, BIRDS, INSECTS, FISH, PLANTS, MINERALS, &c.

ANIMALS.—The Indian black bear (*Bhal*) is the most destructive wild quadruped of considerable size, and shelters itself in the bare rocky hills scattered through the district of Behar. The principal injury that it commits, is by eating sugar-cane and mangoes, and by drinking the palm wine; for it climbs trees with great facility. When surprised, however, or irritated, he occasionally has destroyed men, and frequently wounds them. The chief native officer of police in the division of Nawada says, that having killed a large one, he found it to weigh five *mans* of the weight usual in that vicinity, or about 295 lbs. avoirdupois. The badger, which Shaw calls *Ursus Indicus*, is found in the same places with the black bear, and is called *Bajarbhal*. The account given here of its manners is similar to that given in Bhagalpur. The same officer of police, who weighed the bear, weighed one of these animals, which was considered a large one, and found it to be three *mans* or 177 lbs. The Indian Ichneumon is not near so common as could be wished, venomous serpents being exceedingly destructive. In old mango groves, especially about Sahebgunj, is a species of Ichneumon not described in any book that I possess, but common about Calcutta, where it is called *Bham* or *Bhondar*. Here it is called *Musbilai*, or the mouse cat, and it is alleged to be very fond of palm wine; but its common food would appear to be birds and fish. Otters are occasionally seen.

The royal tiger or *Selavah* is very seldom seen anywhere except in the wilds of Nawada, where they are said annually to kill from 2 to 4 people, and from 30 to 40 head of cattle; and they are so fierce, that even the buffalo cannot resist their attack. This ferocity seems to be owing to the want of game. In the rocky hills scattered through Behar the spotted tiger (*Kengduya*) is not uncommon, and occasionally destroys both men and cattle; but his chief prey seems to be the antelope. The people of these districts seldom venture to

attack either kind of tiger; but hunters in some years come and kill one or two. The *Kohiya*, or wild dog, visits also these districts, usually in Spring. Jackals are not numerous, and there are but few wolves. The small Indian fox (*Canis Bengalensis Pennant*) is not uncommon. There are very few porcupines; but in the drier parts of these districts hares are very numerous, and by the lower classes are a good deal sought after for eating. They are caught both by dogs and nets. The small striped squirrel (*Gilhari*, *Rukkhi*) is exceedingly numerous both in houses and plantations. It is a beautiful lively creature, very familiar and active.

No wild elephants haunt these districts, but a very few make occasional incursions from the wilds of Ramgar. In Nawada these incursions were formerly frequent and destructive. It some years ago happened, that a Brahman had prepared from the poisonous root of Nepal, called here *Dakra*, a certain oil used as an external remedy in disease; when, the elephants coming, one of them accidentally eat of the oil, and died. On this some low people made balls of this oil, mixed with grain and other things, of which the elephant is fond, and having placed these balls in the way of the herd, 15 or 16 were killed; since which these cunning animals have given no farther trouble to that vicinity. There are no rhinoceroses. Wild hogs are occasionally seen, but they are nowhere numerous nor destructive, being eagerly pursued by the lower castes, who eat this flesh. The antelope cervicapra (*Bareta*) is the only animal included by the natives in the generic term *Harin*, that I saw, and it seems chiefly confined to the vicinity of the Rajagriha hills, nor even there is it common. There are several other animals which the natives refer to this genus; such as the *Ghoraroj* mentioned in my account of Bhagalpur; the *Chitra*, which is probably the *Cervus axis*; the *Kod*, which is probably the stag; and the *Derk*, which is probably the *Cervus muntiac*. All these animals are scarcely ever seen, except just towards the boundary of Ramgar. There are a few monkeys of the long tailed kind. There are no wild buffaloes, nor are these districts ever visited by the wild animal of the ox kind, mentioned in the account of Bhagalpur. In fact, wherever industrious man appears, all these pernicious animals must give way, and nothing but a want of exertion can be assigned as

the reason why many parts of Bengal are allowed to remain subject to their depredations. In these districts there are no professed hunters; but, as I have said, many of the lower castes are eager in the pursuit of game for their own pot: it is seldom sold.

In the Ganges porpoises are numerous, but no one pursues them, nor is their oil in request, although they are occasionally taken in the fishermens nets. Birds of prey are numerous, but do little harm, nor are any fit for sport bred in these districts; 50 or 60 families keep trained hawks, this being the favourite amusement of the great, in which some even of the Gayawal priesthood indulge themselves. The profession of falconer (*Mirshekar*) being very low in the estimation of the Hindus, most of the men who keep the hawks have become Muhammedans. With a rod dipt in bird-lime they catch enough to support their hawks, and a few of them catch quails, partridges or teal for sale; and it is said that some of the two former are fattened for eating, but I have not seen such; nor during my residence at Patna have I seen any one wild bird at at any gentleman's table, not even the Bageri lark, usually called Ortolan, although these are abundantly common, and very destructive to the crops that remain in spring. In the cold season a great variety of excellent waterfowl abound in the reservoirs and ponds of Behar, but they seem little sought after, so that with little or no trouble I procured a great abundance. Quails are often tamed for fighting. Singing birds and parakeets are not caught in these districts, but a great many are kept. The most destructive birds to the crops are several species of crane, (*Ardea Antigone*, *A. Grus* and *A. Virgo*), which abound in the cold season, and the Karakul (*Tantalus manillensis*), which remains all the year. Sugar-cane suffers most, and chiefly from wild hogs, bears and jackals. In the Ganges, tortoises are very numerous, and are often caught by the fishermen, who eat them; but they are scarcely saleable, no other castes near the river caring for this kind of food.

Both kinds of crocodile are common in the Ganges, but are not pursued; nor are lizards in request with any, but some of the dregs of impurity. Serpents are fully as numerous and destructive as in Bhagalpur, and according to the report of the natives, probably from 300 to 350 persons are

annually killed by the bites of these reptiles. Except on the banks of the Ganges, fish, during the greater part of the year, are scarce, and mostly of a very poor quality. In the Son, indeed, the fish is better than that of the Ganges, nor have I ever seen fresh-water fish of a quality superior to several kinds of the carp which are caught in that river; but, whether from the fish being there scarce, or from want of sufficient skill in the fishermen, the supply from the Son is trifling. In the rainy season, indeed, this river swells so enormously and rushes with such violence, that few fish, I believe, could by any means be caught; and in the dry season the water is in general so shallow and clear, that the simple and imperfect methods used by the native fishermen are quite inadequate. The other rivers of the interior are mere torrents; and, although a few fish ascend in the rainy season, and are caught when the water subsides, the supply that they give is trifling. In some places, however, the fishermen, after the rivers have greatly subsided, form dams that collect deep pools of water, into which all the remaining fish assemble, and are kept as a supply for spring. The reservoirs made for watering the fields during four or five months in the year, give a considerable quantity of fish, but all the kinds are small, seldom exceeding three or four inches in length. In August every rice field swarms with such, and many of them, no doubt, make their way up the rivers, and from thence through the canals used in irrigation, and through the rills that fall from the fields; but, as I have before several times stated, these means seem to be inadequate to account for the number of fish that appears, and I have no doubt that the greater part is bred from eggs that remain dry in the soil, until hatched by the heat and moisture of the rainy season. As the fields dry, a great many of these fish become a prey to the lower class of farmers, who catch for their own use; but vast multitudes flock into the reservoirs, ditches being in general cut to give them a passage as the waters retire. The reservoirs are let by the owners to professional fishermen, who, as the water dries up, catch the fish with very little trouble, and the supply continues pretty copious until February. In the Ganges the supply of fish is copious from the middle of October, until the rainy season has swollen the river about the end of June.

The fisheries in the pools and reaches of the rivers of the interior, in the reservoirs and in ponds, are annexed to the lands by which they are surrounded, and are let for very trifling sums. The whole fisheries in the division of Sahebgunj, I was told, let for about 7000 R. a year, to about 800 fishermen; but this is a very large proportion of the whole of the fisheries of the Behar district, which I am told may let at for about 1600 R. a year. Some landlords, however, agree with people who undertake to keep the reservoirs in repair for the fish. In the district of Patna city, the fisheries may be let at between three and four thousand R. a year. The main stream of the Ganges is free to all but fishermen, for the land which their hut occupies always pays higher than any other class. Any fisherman may therefore use the great river; but if he erects on the banks a shed however wretched, he must pay rent in the rate of which his gains as a fisherman are always considered. In creeks or channels of the river that in the dry season have no current, the fish are the property of the owner of the bank; but the number and extent of such in these districts is very trifling, and disputes about the property of the largest in the immediate vicinity of Patna, have put a total stop to its being used, it not being the duty of any person to interfere. The supply in Patna, however, from the middle of October to the middle of June, is copious, there being many fisheries on the north side of the Ganges.

Very few of the fishermen live the whole year by this profession. During the rainy season those near the Ganges act chiefly as boatmen, and fish about eight months. In the interior, during spring, some of them go to the forests to make catechu, and the remainder reap wheat and barley. In the early part of the rainy season they transplant and weed; they fish only therefore four or five months, and their operations are much interrupted by the rice harvest, in which during winter by far the greater part is employed. During the time that they are employed in fishing, it is supposed that, besides paying the rent of the fishery, which is high, each man, assisted by a woman to sell, can clear from three to five R. a month. Near the Ganges it is supposed that there are 530 houses of fishermen, in which there will be about 1200 able bodied men. These have not above 200

boats employed in fishing, exclusive of what are used as ferries. In the interior there are about 1100 houses, with more than double the number of able-bodied men. These have no boats, except such as are employed as ferries, and a very few in the Son. It must be observed that the number of people of fishing castes is much greater than what I have here stated; I only here include such as are actually fishermen.

With respect to the kinds of fish I have few remarks to offer, as no reasonable remuneration would induce the fishermen to bring me a complete set of the various sorts. In the most favourable season of the year I hired two men for two months to attend the fishermen, and to purchase every kind that was caught. Among those the Raja (called *Saukchi* at Mungger) is sometimes three feet in diameter. A considerable quantity of oil separates from it in boiling, and is used as a medicine. Great numbers are caught when the river begins to fall.

Crustaceous fishes are abundant in the Ganges, and are of three sizes. One, as large as a small lobster, is called Gorra; a second, like a prawn, is called Jhingga, is the best, and is the same as that mentioned in Bhagalpur; the third and least, like a large shrimp, is called Echna. I observed no crabs.

Insects, especially the white ant, are not near so troublesome as in Bhagalpur. Locusts (*Tiddi*) have been seen, but very seldom; nor is the damage that they have done so considerable as to have attracted much notice, as by far the greater part of the natives have never heard of such an animal. Muskitoes are not at all troublesome, except in Patna, and there are not near so bad as in Calcutta. It is observed that an easterly wind drives them away; and that they return when the wind blows from the west. In fact, the easterly winds do not seem favourable to animal life. The common fly at Patna is the greatest nuisance of the insect tribe, and in the city is almost intolerable. Honey bees are only numerous in the wilds, and there the Bhungihar and Musahar collect a little honey; but, as the property has not been fixed, and as no rent has been demanded, the quantity of either honey or wax that is brought to market is quite trifling. The honey, indeed, serves occasionally as a repast to the low castes,

or to venturesome boys; but the wax is in general lost. In every part the shells of various moluscæ are gathered for burning into the lime used in chewing. These shells abound in the reservoirs preserved for watering the fields, and in the low lands near the Ganges. I here may remark, that in these low grounds I found the living animal of that species, which I saw in a fossil state in the Asurhar of the Bhagalpur mountains, which is therefore by no means a marine production, as I was inclined to think when I described that district.

Plants.—This district is in general too much cultivated to be a good field for a botanist. I however met with many plants which I had not before seen, and the species differ more from those near Calcutta than those of Ronggopur, Dinajpur, or Puraniya, the difference in the dryness of the air having more effect than the difference of latitude.

The whole of the waste land that is inundated as calculated in the Appendix amounts to 26 miles, and almost wholly in the islands or low banks of the Ganges, is covered with tamarisks and reeds, and devoid of trees. Of the high but level land that is waste and overgrown with ligneous plants, amounting by the above statement to 384 square miles, probably 100 miles are covered by mere scattered bushes, and the remainder, 284 miles, is occupied by woods. Of the 123 miles of hills, almost a fourth part may be quite naked, leaving about 90 miles for woods; so that the whole forests in Behar, for there are none in Patna, may amount to between 370 and 380 square miles; and, including tamarisks and other bushes, there may be in all about 480 or 490 square miles covered with woods or thickets. The larger proportion by far of the low thickets in these districts, amounting at least to 80 square miles, consists of scattered bushes of a species of Zizyphus *(Janggali Bayer)*, which occupy the poor lands towards the Son. None of the hills here are cultivated, which perhaps is the only cause specified in the account of Bhagalpur, which does not also operate in Behar in reducing the woods to a stunted condition; and, the extent here being comparatively small, these causes produce a stronger effect; so that the bushes which the blacksmiths cut for charcoal are very stunted. Mango and fig trees and palms have been reared to a great extent. Trees for the supply of the carpenter,

joiner, or cabinet-maker, with valuable materials, are surprisingly scarce. The bamboo is planted in a few gardens, rather as an ornament or curiosity than for use; and at Patna large bamboos are dearer than even at Calcutta, although they are cultivated on the opposite side of the Ganges. In the interior they are not procurable. The kind that has been planted is called *Chal-Bangs*, and is the *Arundo arborvasaria* of Rumph. Wherever attempted to be cultivated, it has thriven, and to its scarcity may be attributed much of the wretchedness in the huts of the natives.* In many parts of the Rajagriha hills, where the soil is tolerable, a belt of the small wild bamboo surrounds their base; but as no pains are bestowed on preserving them until full grown, very little advantage is derived from this source. The southern hills of Sheykhpurah and Nawada give a considerable supply of this bamboo, which entirely resembles that of Bhagalpur, called *Tanai-bangs*; but owing to the same want of care this supply is not more than adequate to serve the south-east parts of the district. Sahebgunj and its vicinity procure bamboos from Ramgar, and all the banks of the Son and Ganges are supplied from Rautasgar. In the gardens near Patna a dwarf bamboo has been introduced from China, if we may judge from its name (*Chiniya-bangs*). It grows only to the size of a shrub, and its branches form clusters (*fasciculi*). It has now become an officinal. At Patna and Sahebgunj a few cocoa-nut palms have been planted as a curiosity; but their fruit does not come to maturity. The Khajur palm is every where abundant, and every where cut for its juice, so that it is an object of very considerable importance. The season lasts from Kartik to Phalgun, that is, from the middle of October to the middle of March, or five months; but on the whole each tree does not bleed more than from 25 to 30 days in the season, the process being nearly the same as described in Bhagalpur. No sugar is here made from the juice of this palm. Mats are made of its leaves. The Tar or Tal Palm (see Bhagalpur) is abundant. The Tal Palm naturally and usually flowers in the heat of spring, and such as flower then are called Sahi. These give a great quantity of juice, pro-

* The bamboo is of the utmost use throughout the East.—[Ed.]

bably on an average 6 *mans* (492 lbs.). Some few trees, that from unknown causes do not flower in spring, push out their flowers in the cold season, and give a scanty supply; but in spring many are rendered artificially barren by breaking off the flowering bud (*spatha*), as it begins to form. These also flower in the winter season, and are called *Basanti*. They do not give above 2½ *mans* of juice, but this is of as much value as the 6 *mans* which a tree gives in spring. Either the male or female will answer for the spring or winter crop; but the females alone will yield juice in the rainy season. When this is wanted the fruit is allowed to form, and afterwards the point of the spadix, or stem which supports the clusters, is cut and allowed to bleed. This does not prevent a great many fruit on each cluster from coming to maturity. Palms managed thus are called *Ghour*. The fruit ripens in August; but many of the stems continue to bleed until October. A species of insect, which I have not been able to procure, sometimes attacks the heart of this tree, and occasions it to languish. The remedy is to cut a hole, about six inches long and two wide, entirely through the middle of the stem, and four or five feet from the ground. The stem is found hollow, and a great deal of rubbish, like saw-dust, falls out; but the palm soon recovers, nor do I know what becomes of the insect. It probably undergoes a change, and comes out by the hole. The Terminalia Catappa is found in gardens, and is called *Kath-Badam*, or wild almond; as the people here have learned from those of the west, that the real almond (*Badam*) is a very different tree; while at Calcutta the Terminalia is the only Badam known. The Catappa, however, in these districts is an exotic, and I suspect is so in all parts of India proper, and has probably been introduced from Java.

The Asan is found in the forests of the Sahebgunj and Nawada divisions, and is applied to rear the silk-worm, called Tasar in Bhagalpur, but here most commonly known by the name *Koya*. The only kind almost used for thread is that called *Dhabha*, and is chiefly reared in the beginning of winter; but in order to procure seed, as wild is not used, a small crop is reared during the rainy season.

The Takahar is a *Cornutia* or *Premna*, common about the villages near the Ganges, and has a very strong hircine smell. It seems to be the same with the Dankari of the Ronggopur

list. The leaves are officinal. The wood is used only for fuel.

The Cerbera Thevetia, which was introduced by Dr. Roxburgh into the botanical garden so late as the year 1801, and reared from seed which he procured from Pennsylvania, has now become a very common ornament in the gardens about Patna; and the people have lost all idea of its being an exotic. A Brahman of Mungger brought it to me as the *Pitsugandhi karbi* of the vulgar dialect, while in his books he has no less than five Sangskrita synonyms for this plant; and a druggist of Patna brought it to me as the *Jarad Kanel,* which had been used time immemorial in the shops of that city. Jaradkanel, it must be observed, signifies yellow oleander, and it is possible that the American plant may have been mistaken for some other of the *Apociniæ,* with a large yellow flower, that I do not know. The Strychnos (*nux vomica* of botanists) here, as well as in Bhagalpur, is called *Kungchla,* and is one of the most common trees in the woods. On the most naked of the hills I found in fruit some dwarf plants, each berry containing only one seed; but I cannot exactly pretend to determine whether this was owing to the aridity of the soil, or to a difference of species.

Under the name of Strychnos potatorum, as Willdenow observes, botanists seem to include two species. The Nirmal, which I saw in Sheykhpurah, entirely resembles the description given by Willdenow, and has its leaves veined. The fruit is used in medicine as a topical application for inflammations of the eye, and is sold in the markets to clear turbid water. The Bassia, as in Bhagalpur, is called *Mahuya.* In the wild parts of Nawada many trees of this are scattered on the high poor land, that is cultivated with pulse or sesamum; but the whole number of such, when compared with the total amount raised in the district, is but small, and by far the greater part is reared in plantations, generally intermixed with mango trees, which are scattered through every part of the district. The wood at Patna is reckoned strong, and is used for posts, beams, doors, windows, and other joiner's work; but it does not take a polish, nor is it so durable as the Sakuya or Shorea. The oil expressed from the kernels is used in medicine, and for the lamp; but is not eaten. Some of the poor use the flowers for a part of the year, in-

stead of grain, but to a much smaller extent than in Bhagalpur. As these flowers supply nourishment, the distilling from them deserves more encouragement than that from sugar, because in all countries one of the means most capable of alleviating famine will always be found in employing, during ordinary seasons, a large proportion of vegetable nourishment in making strong liquors. Grain is, no doubt, that which ought to be in general preferred; but Mahuya has the advantage of being less likely to be affected by the seasons which produce a scarcity of grain. In Nawada, where most of the spontaneous trees grow, it was stated that the average produce of each tree was one *man* of that country weight, equal to 31½ sers Calcutta weight, or to about 64 lbs. avoirdupois, which on the spot sells to the trader for eight anas. In Duriyapur again, where most of the trees are planted, the produce of each was stated at from ½ to 3 *mans* (56 s. w. a ser, 6 sers to the paseri), or from 34½ to 207 lbs., worth at the rate from 1¼ to 3 *mans* a rupee. Most of the trees are retained by the Zemindars in their own management. Sometimes they hire people by the day to gather the flowers, and sometimes they make an agreement with poor people to receive a certain quantity for their plantation, the gatherer taking the surplus for his trouble. The flowers are usually gathered twice a day, at sun-rise and noon. The Gab, or *Embryopteris glutenifera* of Dr. Roxburgh, is planted about villages; and the fruit is used in paying the bottom of boats to exclude worms and preserve the timber. Fishermen use it also for preserving their nets. The fruit dyes silk black. Both bark and fruit are officinal. Its timber is fit only for fuel. The bark of the Palas root is here called Raswat.

The Kadam of the Bhagalpur list is found pretty common about villages, and is here also called Kadam. The wood is considered as of very little value, and the tree seems to have been everywhere planted as an ornament. I am inclined to think that both in Bengal and Behar it is an exotic; nor do I recollect to have ever seen it in a forest that could be considered as primitive.

The common Soap-nut (*Ritha*) of this district, although it is the *Sapindus emarginatus* of Willdenow, is not a *Sapindus*, but an *Euphoria*. It is pretty common about villages, and grows to a good size; but its timber is little, if at all used,

except for fuel. The fruit is used for washing silk and woollen cloths, and in medicine. The Sakuya, or Sakhuya, is the same with that of the Bhagalpur list, and is confined to the southern forests, where it is found only in very trifling quantities, and is very much stunted, partly by being cut whenever it is fit for the smallest use, and partly by extracting the resin, which here, as well as in Bhagalpur, is called *Dhuna*, and is used for incense. The quantity of this resin procured in these districts is quite inconsiderable; but pretty large quantities might be had at Patna, and it seems to be a substance that might be useful in the arts, but it is dear. If of a fine quality, it usually sells at five rs. a *man* (76 s. w. a ser), or about 76 lbs.; but the ordinary kind costs only two rs. Various kinds of citrons are found in the gardens, and oranges are common.

The Tabha of Gaya, has subcordate leaves, and a round fruit as large as a man's head, with an insipid juice. The Salhar or Salai of the Bhagalpur list, is one of the most common trees in the woods of Rajauli, where it is called Sali. I have already stated,* that Mr. Colebrooke considers this as the tree which produces olibanum or frankincense, and I have mentioned some difficulties that occur in adopting this opinion. The druggists of Rajauli informed me, that they use the resin of this tree in medicine, and call it *Birojabadi;* but from all their shops I could not procure a specimen that was worth the taking; and at Patna the Birojabadi is quite unknown. The druggists there have two Birojas, but both are evidently turpentines, the produce of pines from Nepal. The Guggul, which is the common incense used, and which is said to be called by the Sangskrita names, mentioned by Mr. Colebrooke as synonymous with olibanum, is said indeed to be brought from the hills of the south; but it is stated to be the produce of a very different tree. Some plants of *thio* have been introduced at Patna, and in Ronggopur I found the same tree in the garden of a Zemindar, and considered by him as the Guggul. The Guggul used at Patna comes from Calcutta.

The Simal of the Bhagalpur list is here called Simar, the L of the eastern provinces being very often in the west changed to R. This tree is not here very common, but both its cotton

* See subsequent volumes.—[Ed.]

and planks are in request; the former for stuffing pillows. For this purpose it is preferred to the cotton of the Gossyppium, because it is supposed to have a heating quality. The wood is chiefly used for packing boxes and palanquins. The gum of this tree called Mochras is used in medicine. The sandal tree (*Sirium* of botanists) is found pretty common about the monuments of saints, where it reaches a greater size than on its native hills. It is called Sundul, and its leaves are used in medicine.

The apple tree (*Malus communis*) produces readily in these districts; but its fruit, although externally resembling pippins, are perhaps not so good as even that of the *Eugenia Malaccensis*. The tree is called Seo, and seldom grows above seven or eight feet high, being evidently in a climate not suited for its thriving. The pomegranate (*Anar*), loquat and guava are very common. The peach (*Amygdalus Persica*) was no doubt introduced into Hindustan long before the arrival of the Europeans, although this would not appear to have been done in Bengal, where the European name prevails; but here the tree is called Satalu. It is common in the gardens of the natives; but, being neglected, the fruit is execrable, nor do the natives seem to like even those that have been raised by Europeans, some of which are pretty good. The tree however thrives much better in Tirahut than in Bengal. The common plum (*Prunus domestica*) as would appear from its name (*Alu Bokhara*) would seem to have been introduced from the banks of the Caspian. It produces copiously small purple and yellow plums of a very poor quality, but fit for baking.

The Khayer or *Mimosa Catechu* of these districts is exactly the same with that of Bhagalpur. It is confined to the woods of the south-east part of Behar, where it is kept very stunted by those who prepare the extract, although the quantity procured was stated to be very trifling. In Sahebgunj it was stated, that about 400 persons men and women are employed part of the year, and in Nawada 40 persons were mentioned. About 140 of these persons are fishers, and not only make catechu, but collect timber, bamboos and leaves for platters, so that the quantity of catechu, which they make, is very inconsiderable, and may amount to about 50 or 60 *mans*. The other 300 work all the cold season, except during the rice harvest, and may make nearly about

the same quantity as in Bhagalpur, that is about three *mans* or 270 lbs. each, but this is worth to them at least double of what the wretched creatures in Bhagalpur receive, as the people here are paid in money at the rate of four rupees a *man*. They pay no rent.

The tamarind is not so plentiful as in Bhagalpur. Of many fruits which a Frenchman tried to ferment, he found that this gives the liquor most resembling wine. It must be mixed with sugar before fermentation, but the tamarind regulates the fermentation of the sugar, so as to produce a strong clear well flavoured vinous liquor, with a degree of briskness resembling that of champaign.

The Parkinsonia aculeata has made most extraordinary progress, as it is only a very few years since it was brought to India by Dr. Roxburgh, and now it is the most common tree in hedges near Patna, and has spread to many other parts of these districts. The Kangchnar or Koenar of the Bhagalpur list in these districts is called *Kachnar*. There are here four kinds, two having hairy leaves, and two smooth; while one of each has red, and the other white flowers. Mixed in the same plantation the different colours of their elegant and odorous flowers add much to the beauty of the view. The Paras of the Bhagalpur list is perhaps the most common of the spontaneous trees in these districts. The bark of its root is used for caulking boats. The seed is used in medicine. A gum exudes from this tree, which has some affinity to those called Kino in Europe, and would appear to be a valuable medicine.

The mango has in many parts of these districts been extended beyond all reasonable bounds. The quality is very much neglected; nor is any tolerable fruit to be usually procured in the markets of Patna. This is owing entirely to want of care, as in Mr. Welland's garden are growing some, that are very fine, and have been introduced from Bombay. At Patna, where there are immense plantations, the fruit sells at from one to three rupees a tree; nor is the number anywhere so great, that the fruit cannot be sold. The Zemindars preserve almost the whole as their own property, and let the trees annually; but seldom get more than half the produce. At the town of Behar this may on an average amount to 600 fruit, or one rupee a tree. At Durinyapur again the value is

not above ten anas a tree, and at some places is as low as eight anas a tree, which as a bigah of this country measure, or 27,780 square feet plants 25 trees, is about 12½ rupees for the lowest rate of each bigah. The flower of this tree is liable to be affected with a disease, which swells the whole branch into an irregular thick corymb called *Amkabanda,* that is used in medicine. The preparations of the fruit most used here are as follow: 1st. *Amchur,* which is the green fruit, before the stone hardens, cut in two, and then beaten in a mortar to a powder, which keeps the whole year. 2d. *Amkakhatai,* which is the green fruit cut into slices, and dried in the sun, the skin and stone being removed; this also keeps the whole year. 3d. *Achar,* or pickles prepared as in Bhagalpur, but with more additions, as turmeric, nigella seed, salt, fennel, and mustard seed. 4th. *Morabba,* or sweet-meats. 5th. *Amaut,* which is the juice of the ripe mango dried. Much of the timber is sold for fuel, and for making packing boxes. A tree, that will give planks 18 inches wide, sells standing at from 2 to 2½ rupees.

In my list of Bhagalpur trees, I by some mistake omitted the Kusum, which is one of the most valuable timbers in that district, and is found in very considerable quantities. It is much sought after for the pestles of oil and sugar mills, being very hard and heavy. It seems to be of the same genus with the *Cussambius* of *Rumph,* evidently the same name, and I have little doubt that the seeds called Koon, which Gartner described, taking them to belong to a species of *Octma,* belong in fact to our plant, or to another species which grows in Mysore, where it is called *Shagada* or *Kshandala,* but in Kankan the term *Kusum* is used. The tree of the south indeed differs chiefly from that of Behar, in having hairy instead of smooth leaves, and its timber is equally valuable.

In many parts of these districts, both in woods and near villages, I observed a tree with very ornamental foliage, which belongs to the genus Ailanthus; it is called Ghora-karan, and Achin, a name that in many parts is given to a species of fig-tree, to which this has not the smallest affinity. The tree is used in medicine, and its branches, when newly broken, have a very singular but offensive smell, which indicates its being possessed of some power. It grows chiefly in sandy lands on the banks of rivers.

The wild Jujub, with a very round fruit, is not very common in these districts. This tree might be rendered valuable on account of its leaves, which are a favourite food with both sheep and goats; and as it bears pruning remarkably well, and thrives in any soil, it might supply, during the whole dry weather, large herds of these useful animals, while in the rainy season, the grass that shot up in the plantations would give a supply of provender.

The cultivated Jujub, which has an oblong fruit, is not uncommon in these districts, and its fruit is not very bad, resembling somewhat an insipid apple; it sometimes weighs one Chhatak (877 grains).

The Pipal or Pipar of these districts, as well as of Bhagalpur is the Ficus religiosa. One of these trees on the temple of Mahamuni at Gaya, is the celebrated Bodhi tree of Ava, which the worshippers of the Buddhas consider as the centre of the world. The word Bodhi is one of the Pali or Sangskrita names for this tree.

The fig-tree of Europe has been introduced into a few gardens at Patna. The Hindustani fig is a different, but very nearly allied species, which is not described in any botanical books that I possess. The fruit is tolerable, and might probably be rendered good by planting the trees against a wall, with shelter to keep off the rain, by which it is generally prevented from becoming thoroughly ripe. There is a variety of the mulbery with a green fruit, which is very sweet, but rather juiceless.*

In these districts reeds are of very little importance. Of the 26 square miles of inundated land that are waste, one half perhaps is covered with tamarisks, and the remainder is almost all that can be said to produce reeds; for on the clear waste land that is high, and which amounts to 202 square miles, the grass although long and harsh, can scarcely be called reeds, nor do the gramineous plants in the forests (bamboos excepted) arise to that stature. On the islands and low banks of the Ganges, the most common reed seems

* The trees, plants and fruits of Behar and Patna are pretty similar to those of Boglipoor and Puranya, and the species omitted here will be found under the description of those districts.—[*Ed.*]

to be the same with the Kasiya, or Kas of the Bhaghalpur list. The leaves at Patna are called *Jhalasi*, and are used as thatch, although very bad. The stem is called *Kharai*, and the upper part, which supports the flowers, is called *Muj*, and is used for making ropes; but it is not of the best quality. The young leaves are considered as good fodder. The coarse grass most common in the higher lands is the Khatra of the Bhagalpur list, and is that most commonly used for thatch. Its sweet smelling root is here called Khaskhas. The long grass in the woods that is of most use, is the Sabe of the Bhagalpur list, the collecting of which on the southern frontier gives employment to a few people, but the supply from thence is quite inadequate to the demand, and great quantities are imported from Ramgar. In hedges and on the sides of sugar-cane plantations, several other reeds are reared, and these might readily be extended, so as amply to supply the demand without running the smallest danger of harbouring destructive animals. The kinds reared in the hedges, so far as I observed, are similar to those cultivated in Bhagalpur. The wild plants used in the diet of the natives, as must be the case wherever the country is tolerably cultivated, are of very trifling importance. In most years the Mahuya flowers in the wilder parts of the country, are used as a part of the food of the lower classes; and in years of famine the stoppage of the distillery might produce some alleviation of the evil.

In times of scarcity the poor derive some assistance from collecting the mango stones, and by extracting the kernels, which they bruise in a mortar and form the powder into cakes. Wild plants of a succulent nature are very seldom used in curries by the poor of these districts. Leafy plants that grow spontaneously are rather more used, chiefly the Kalmi or *Convolvulus repens;* Bathuya, a small *Chenopodium;* Gendhari, an *Amaranthus*, and Guma, a *Phlomis.* The poor, indeed, seldom use vegetables cultivated for the table; but they are allowed to collect young plants of mustard, pulse, or the like, which are always sown too thick, and cost them nothing. The only wild acid seasoning, which costs the poor nothing but the trouble of collecting, is the Jhar-Bayer. All the others are here saleable, and the trees are private property and are planted. The wild fruits that

are eaten raw, are only Baingcha and Kend; the others are all saleable, and the trees are considered as private property and are planted. There are no wild aquatic plants used in diet: great quantities of the Singghara are indeed reared, but it is regularly cultivated, and almost every pond or piece of water that retains water throughout the year, is applied to rear this plant.

MINERALS.—The minerals of these districts may be divided into three remarkable clusters of hills, with some sporadic matter in the plains, and shall be described in that order.

Minerals in the Southern range of Hills.—By far the greatest part of the rocks of Behar, for there are none in Patna, is of exactly the same nature with the great component part of the western division of Bhagalpur, that is, consists of quartz, or of jasper, or of the horn-stone of the later mineralogists, and these running so into each other, that it is often impossible to say to which the rock has the strongest resemblance. The hills composed of these materials have a most arid and sterile appearance; but, in general, very inferior in grandeur to those of granite. The latter rise into peaks of the most magnificent boldness, and they are better wooded; their crevices being more favourable to vegetation, although the siliceous hills give rise to more springs of water and perennial rivulets. In the recesses worn out by these, there are often abrupt precipices and scenery of great magnificence, although the most striking feature of these siliceous hills is sterility. The hill west from Gidhaur, in the Bhagalpur district, is of this nature, and extends into this district, where similar materials bound on the south all the division of Sheykpurah, and a considerable part of Nawada. The eastern end of these hills consists more entirely of the quartzose stones than the west, in which granite stones are more prevalent; and this induces me to suppose, as the eastern end is much further north than the western, and as the particular hills run mostly east and west, that these hills, which form the southern boundary of Behar, may belong to two distinct mineral arrangements; the one towards the north and east being connected with the Mungger range of hills, while the other may be connected with hills of a different description, extending into the Ramgar district; but I have only had an opportunity of a partial view of their northern

side, and shall not therefore form divisions for which there may be no foundation.

So far as I know, the hills extending immediately west from Gidhaur into the Sheykhpurah division, and giving rise to the Dhuruya, Bahuyara, Som, Uruya, and Dhund rivers, consist entirely of quartz, of jasper, and of the hornstone of the later mineralogists, but I had only opportunities of examining a few parts. The next range towards the sand west, the most prominent part of which is named Siyur, seems more varied, and especially the small hills on its south side, which have a more rugged granitic appearance than the great mass of the hill. The western end of this, which is named Denuya, consists entirely of quartz, most pure and glassy at the bottom, and more mealy and intermixed with ferruginous and other heterogeneous substances towards the summit. The small hill again in Harkharghat, at the middle of this range, is a granitel of much black micaceous matter, intermixed with a little white quartz, which in many places forms little lines somewhat like the Egyptian granite that I have seen; and this would no doubt be a very ornamental stone, should large entire blocks be procurable; but without much labour that could not be ascertained, and the specimens, that I procured, were rifty. The small hill Sumba, north from Harkharghat, consists of schistose mica, composed of reddish quartz and silvery mica. Basai, the small hill next to Sumba on the west, consists of a jasper, variegated red and white, and the surface in some places covered with irregular crystals of white quartz.

The low continuation of Siyur, which extends between the Sakri and Khuri rivers, and is called Kalana, consists of granular quartz or hornstone, which towards the bottom of the hill is red, and towards the top white. The continuation of the same hill beyond the Khuri, which is called Sherpur, consists of large grains of fat quartz, forming an aggregate intermixed with dark dots. The whole of the centre of this ridge may therefore be considered as consisting of quartzose rock; but I have already said, that the little detached hills on its north side are composed of other materials, and the same is the case with those towards the south. Near the above-mentioned Kalana hill, on its south side, are two hummocks called Dhakni. The smaller of these consists of

schistose mica, as does also the fine little hill called Purni, which is some way south from it, and from its summit affords one of the finest views which I have seen in the course of this survey. This schistose mica, consisting of white quartz and silver mica, runs south-west and north-east, with an inclination to the north-west. The larger hummock of Dhakni seems quite sporadic, and consists of earth containing large masses two or three feet in diameter, of a fine blackish hornblende, with numerous small crystallizations immersed, and promises to be a stone well fitted for ornamental building. It is exceedingly heavy. This hill in its structure resembles that of Paingti, near Bhagalpur, where masses of the hornblende are scattered among earth, no doubt arising from parts of the rock that have decayed. In the whole of this district I have seen nothing similar. In no parts of this range of hills have I found any other pure hornblende in mass; but it enters largely into many of the aggregate stones, especially the granitels, one of which has been already mentioned.

The great hill called Mahabhar, which lies south from the last mentioned range, where I examined it on its northern face, consists of a granular aggregate of glassy white and red quartz, which is fine grained towards the bottom, in the channel of the Sakri or Manggura, where it is splitting into vertical plates running east and west; but towards the upper parts of the hill it is larger grained, and quite free from a schistose structure.

Somewhere in this vicinity is, I have no doubt, a place, where small fragments of a rock crystal called Phatik are procured; but for some reason, that I could not discover, the owners were alarmed, and would not allow me to see it, although the value of the crystal must be quite a trifle; but they are poor ignorant timid creatures, although they assume the title of anointed (*Tikayit*), and of warlike descendants of the sun (*Suryabangsi Rajputs*). A Muhammedan trader of Ekbarpur, who had previously shown me some mines of mica, offered to conduct me to the place, and in the evening showed me the two small hills of Ektira as at the spot; but in the morning the Tikayits having joined us, he took me much farther west, to where the Sakri or Manggura issues from Mahabhar, and on the banks of the river showed me as the mine a piece of naked stiff red clay containing many stones

and fragments of rock. On the surface there were no doubt to be found scattered bits of rock-crystal, both crystallized and without regular form, as well as some opaque siliceous nodules, much resembling some of those found on the Rajmahal hills, which I have compared to indurated Khari or Bole; but there was no appearance that the crystal had ever been collected by digging a mine, and I have no doubt, that such a mine exists; but neither the trader nor Tikayits could by any means be induced to show it either to me, or to two men, whom I left to search for it.

In the whole cluster of hills and hilly country south and east from Ragauli or Salabutgunj, granitic rocks, and mines of mica, are the most conspicuous features. The little hill called Lohangr-rishi, with the two adjacent hummocks, are fine grey granite, as are two peaks immediately south from Salabutgunj. The great mountain of Durbasa-rishi consists also of granite; but it is smaller grained, and its felspar is red. In some places of this rock the quantity of quartz, in others that of the felspar predominates. As I found the same stone in the channel of the Dhanarje between Durbasa and Sringgi-rishi, I have little doubt, that the latter consists of the same materials, although I did not actually visit the hill. The granite of Durbasa is perfectly entire, without any appearance of fissure; but some of that in the channel of the Dhanarje, owing merely to the action of the water, is dividing into thin vertical plates, that run east and west. The redder granite of Durbasa is an exceedingly ornamental stone. I had no opportunity of approaching the hill called Gautama, nor those immediately adjacent; but their appearance from a distance is that of pure granite; and Gurba, which terminates the range towards the west, is a vast mass of very fine large grained grey granite that would be highly ornamental in building. The whole of this exterior range lying between Mahabhar and Lohabar in the Ramgar district, immediately west from Gurba and adjoining the plains of Sahebgunj and Nawada, may be considered as pure granite; but the country south and east from it, which contains the mines of mica, although granite, is of a very different structure, which I shall now explain.

As I knew that an agent of the commercial resident at Patna had procured a considerable quantity of mica from the

hills near Rajauli, it was impossible for the Tikayits and native traders to conceal the place altogether from me; but every means was taken to give me imperfect information on the subject. The mines where this substance is dug are partly situated on the Belan, and partly on the two branches of the Dhanarje river. The latter, being the nearest and most important, were at first altogether concealed, and I was sent to the Belan, in hopes that the difficulties of the road would prevent me from proceeding. In fact I could only see one of the mines on that river, and it was by mere chance that there I met with a Muhammedan trader from Ekbarpur, who said that he had been ruined by making advances, which the Tikayit, or chief, would not assist him to recover, and who was therefore discontented. He took me to two of the mines on the banks of the Dhanarje, and gave me an account of the circumstances; for nothing could induce any of the workmen to approach. The reason assigned was, that the agent of the commercial resident had beaten them severely; but this I presume was not true. I have indeed no doubt that they had been alarmed by the traders or owners of the mines, who probably told them that I would beat and squeeze money from them; and they being poor ignorant creatures, who knew nothing of Europeans, would naturally enough believe the story. Both traders and owners were evidently alarmed at any interference in their operations, and no doubt thought that I had come on the part of the Resident to settle a regular trade. The situation of the mines (*khans*), so far as I could learn, is given in the map of the hills of the Nawada division; but I visited only Dharpai, Chirkundi, and Bandarchuya. From a view of these, however, I am convinced that the whole resemble each other. All the part of the country in which they are situated, so far as I saw or could learn, consists of little hills, close huddled together, and separated in some places only by narrow winding vallies. In the map it was impossible to trace these, without having traversed them in all directions, which would have been extremely difficult, both from the badness of the roads and the want of guides, as the only answer I could procure from those to whom I applied was, that they knew of no roads but paths, practicable only for people on foot, and the distances did not admit of that manner of investigation farther than I

proceeded. The ascent to Dharpai and Bandarchuya is very considerable; and all the lower parts of the hills in which these mines are consist of gneiss, according to Gmelin's definition of that term. The gneiss of Dharpai consists of black micaceous matter, intermixed with more or less white quartz; but in most places the micaceous matter prevails, and is often so heavy, that I suspect it to be an iron ore, while in other parts it is perhaps hornblende. All the specimens which I procured were full of rents. If entire masses could be procured, they would be an ornamental material for building. In some detached masses the quartz has been entirely changed or destroyed, and what remains would appear to have become an iron ore, but I saw no rock of this nature. In other places again the quartz is the most predominant matter, and, with some of the black micaceous matter and small garnets, forms a triple aggregate. That near the surface is too much decayed to admit of a fine polish; but by digging, more entire might probably be found. Some of the quartz in this stone is glassy, some is white.

The upper part of both hills consists of rocks of fat white or pellucid quartz and of white felspar, some of which is very beautiful. The mica runs through these matters in veins or nests, just as it usually does in granite, only that the masses are much larger; and the summits of these hills may be considered as a kind of that substance, the component parts of which are rocks in place of grains. In some parts, indeed, the rock adjacent to the mica consists of large grains of quartz and felspar intermixed. The mica of Dharpai (*abarak* of Hindi dialect), as well as of the adjacent mines, although, when split thin, it is perfectly pellucid, when in thick masses, has always a brownish cast, owing apparently to an ochraceous matter, that is always more or less intermixed in the veins. The mica of this mine has been wrought in a line, running along the face of the hill from east to west, about 200 yards in length, but interrupted in the middle by a water-course. It winds very irregularly; but no where, that I saw, comes to the surface, all that came in view having probably been removed. In some places it has been removed from little trenches; in others perpendicular shafts have been dug, from six to twelve feet deep, and from these galleries have been formed, for a short way, into the veins of mica, which seem

no where to be above two to three feet wide. The pieces of mica are so wedged into these narrow places, that in forcing them out with an iron crow, they are usually much broken. Accidents would seem to be frequent, which is not attributed to the want of skill in the workmen, but to the anger of the gods. A stone-cutter who was in my service, a Hindu of pure birth, was going into one of the shafts, in order to break off a specimen, when the guide, a Muhammedan trader acquainted with the usual fears of the workmen, pulled him back in alarm, and said, "Pull off your shoes—will you profane the abode of the gods?"

The mine at Bandarchuya is more considerable, and is situated at the summit of a long and steep ascent. The rock all the way up until near the mine, is exceedingly rotten; but consists of the gneiss, usually called schistose-mica. Towards the summit the rock is either quartz, partly white, partly glassy, or the most beautiful white felspar, or both intermixed. In some places it is quite free from mica, in others it has small masses intermixed. The veins or beds of mica, in several places that have not yet been wrought, come to the surface, and show that it is disposed in various masses impacted together, not parallel, but forming angles with each other. Each mass is composed of numerous parallel layers, the united thickness of which is always less than the breadth or length of the plates. The veins here are larger and nearer the surface than at Dharpai, so that there has been no occasion to form shafts and galleries, the whole has been extracted from trenches, some of which however are now very deep, and so choked with rubbish, none of which is ever removed, that they are wrought with much difficulty. The workmen descend into the trenches by means of single bamboos, the branches of which cut short serve as a kind of ladder. This will serve as a sufficient proof of their want of invention, as the descent is exceedingly dangerous, and every material for proper ladders is growing close to the edge of the trenches.

The mine of Chirkundi is less considerable than the others, and is situated on a low hummock, which consists entirely of fine fat quartz, containing some black dots. The hill being no more than 100 feet high, we have only quartz, although I have no doubt that below the surface of the plain it rests on

gneiss. The workmen having forced out the masses of mica with iron crows, remove all loose leaves, and then cut the masses round, or into parallelograms, according to their size; but by far the greater part of the pieces are small. The largest pieces are two cubits long and one broad, and are valued to the miners at 8 rupees a *man* (48 s. w. a ser, 52 sers a *man*), or 64 lb. Such are very seldom seen. The second size consists of pieces one cubit square, and is sold by the miners at 4 rupees a *man*. The third sort is half a cubit long and broad, and is sold by the bundle, weighing about 15 sers, but comes to about 2 rupees a *man*. The fourth size is about four inches in diameter, and sells at 15 bundles, or rather more than a man for the rupee. The chips and leaves removed in cleaning the pieces sell by a heap, of 7 or 8 *mans*, for a rupee. It is used for preparing a red powder thrown about at the festival, called *Holi*, and for painting walls and earthen ware. These prices are given by the traders at the mine, and must be much enhanced by the carriage, which, until it reaches the plain, must be on men's heads: the market is Patna, to which from Rajauli it is carried on oxen. The miners are usually paid in salt, grain, and cloth, mostly given in advance. The miners are all of the aboriginal tribes, Bhuinghars, Musahars, and Rajwars. Each man pays 2 rupees a year to the Zemindar, and may clear from 20 to 50 rupees a year, according to his luck, for a good deal depends on the vein containing larger or smaller pieces; but about 35 rupees may be considered as the average gain of each man. The miners work 10 months in the year at this employment. The remainder is spent at marriages, and in cultivating a few fields sown with coarse grains and pulse. Ten or twelve usually work together, under some man who is supposed to have skill sufficient to counteract the cunning of the trader: but in this, I believe, he is very seldom successful, unless the trader quarrels with the owner of the mine, in which case the miner will do no work, and will repay nothing that has been advanced; for he has all the disposition in the world to be a rogue, and knows of no other authority but that of his anointed lord, the Tikayit.

The whole mines in Behar belong to two of these descendants of the sun. Buniyad Singha, of Pangchrukhi, possesses:—1. Dharpai, with 30 miners; 2. Dharkhari, 10;

3. Dangrhi, 15; 4. Bheloya, 20; 5. Sapi, 10:—85. Brajamohan Singha, of Dubaur, possesses:—1. Danggarkati, with 15 men; 2. Bandarchuya, 100; 3. Barhariya, 10; 4. Jhakrahi, 20:—145. 5. Chirkundi, not wrought last year.

These 230 men, at the above rate, should turn out mica to the value of 7,000 rupees. There are also many mines of this substance in the adjacent parts of the Ramgar district, so that the whole quantity should be great: but at Patna, where almost the whole is sent, the traders acknowledge only an import of 500 *mans*, worth 2000 r. which at the mine would not cost above 1000 r.; and at Nawada was called only 500 r. Such discordances it is impossible to reconcile. The places which I saw had every appearance of being frequented by the number of people stated as above by the trader of Ekbarpur, and he was perfectly acquainted with the subject; but he was a man on whose veracity no dependence could be placed, although I do not know any reason that he could have had to magnify the quantity procured. The quantity stated at Patna seems too small for the consumption of Bengal, where the amount used in pageantry, both by Moslems and Hindus, at holidays and marriages, is very great.* I therefore suspect that the traders of Rajauli send much direct to Calcutta or Moorshedabad by the way of Virbhum.

On the north side of the range of mountains now described granite was traced, in several parts but whether or not connected with the hills of Rajauli, I cannot take upon myself to say. If it is, the jasper of Gidhaur, Siyur, and Mahabhar, would appear to have been wedged in between the granite range of Rajauli, which probably extends far east, and this granite of which I am now treating. It runs between the hills of the southern frontier and those of Rajagriha; but never rises into any thing like mountains, although in some places it forms small detached peaks. The farthest west that I observed this granite was in the channel of the Dadur, at Futehpur, where it consists of white quartz and felspar, with silvery mica, and is quite below the surface except where laid bare by the river. This is about six miles north from Gurba, the western extremity of the granitic ridge of Rajauli. I next

* It is used on the idols and temples of the Hindoos, and on the dresses &c. of the Moslems.—*Ed.*

saw this granite at Sitamarai, where it forms a very low ridge, or rather an eminence covered with great rugged masses, in one of which has been dug a hermitage, that has been described in the topography. These masses are of a very fine solid grey granite. Finally, this granitic stratum, if it may be so called, extends to the Kiyul, and there rises into many small peaks of a singular nature, which, I regret, were not sufficiently examined, many of the rocks having there a very anomalous appearance. This, I am inclined to suspect, is owing to their having undergone the action of fire; or if it be contended that all granite has done so, that these have been cooled under circumstances different from those that have usually occurred.

Jaynagar, the furthest north of these small hills on the Kiyul, consists of a very solid rock entirely resembling the hard mass of the quarry of millstone near Labeta, described in the account of Bhagalpur, and composed of small masses of fat quartz, united by a greyish powdery substance, in some places tinged red. This powdery matter does not admit of a polish. Various detached masses scattered on the surface of the hill, more or less tinged red, and some of them slaggy, while others of them retain the felspar entire, induce me to think that the whole has been a granite which has undergone an imperfect fusion, so that the quartz remained unchanged, while the other ingredients were in a great measure altered. Some of these fragments bear a striking resemblance to the siliceous concretes that are incumbent on the Khari at Patharghatta and at Kharipatar in the Bhagalpur district. Among these detached fragments on Jaynagar are many of whitish siliceous hornstone; and the rock is intersected by narrow veins of quartz, running in various directions to a considerable distance.

The hill of Satsanda south from Jaynagar contains two granites, both tolerably perfect, although they have somewhat of an uncommon appearance. Both are of moderate sized grains; the one is grey, consisting of white felspar and quartz, with much black granular micaceous matter; the other consists of yellowish felspar, glassy quartz, and a little black micaceous matter. What I procured is rather decayed; but if there are sound masses, the stone would probably be highly ornamental, as even the decayed parts look well when polished.

On the small hill Mayhuya, east from Satsanda, there is a rock of bleached granite of a very strange anomalous appearance, consisting of white felspar, glassy quartz, and black micaceous matter; the first and last of these ingredients are very much changed from their usual form. At Nabinagar, a small hill east from Majhuya, is also a gneiss, which has an anomalous appearance, its materials being very powdery. At Tek, one of the largest of these small hills, there are two granites, both of an uncommon appearance. Both are grey, and their felspar and micaceous matter has become powdery; but the white matter in the one and the micaceous black matter in the other are the predominant materials. The former admits of a good polish, but the latter does not. On the bottom of Tek are masses of a strange kind of glassy quartz, intermixed with brownish matter. I do not know whether this forms a rock or is in mere detached masses. On Dhanawa, south from the four last-mentioned hills, is a strange kind of siliceous hornstone, whitish, livid, and red. Some of it is evidently a slag, while in other portions some remains of the rhombs of felspar may, I think, be traced. On the whole, perhaps, it would appear that these hills are a continuation of the granitic ridge which passes by Futehpur and Sitamarai, and has been changed by the action of fire.

Minerals in the Hills of Rajagriha, &c.—I now proceed to treat of the next great cluster of the minerals belonging to this district, which commences, so far as I could trace it, between the Nilajan and Mohane, opposite to Buddha-Gaya, and extends in various interrupted chains of hills to a considerable way past Sheykhpurah, running about south-west by west and north-east by east, but not in a straight line, as it forms a curve with the convexity towards the north. This cluster is about 60 miles in length, but there are many interruptions, especially between Giriyak and Sheykhpurah, where there is a level space of about 18 miles, in which the rock, so far as I know, appears only at Behar. That, indeed, is a little north from the line of other hills; but, being exactly of the same nature, no doubt belongs to this cluster. The general breadth of this is about 9 or 10 miles, divided into various ridges running pretty nearly parallel with each other, and separated in many places by fine arable land. The most compact part consists of two long ridges nearly adjoining,

and called the Rajagriha hills, from whence the whole may be named. This cluster, except along its northern face, consists almost entirely of quartz, siliceous hornstone, or jasper, with very few extraneous matters, and abounds in hot springs. Along the northern face there is a greater mixture. I shall therefore first describe the more perfect part, and then the changes which it has undergone on the northern face.

The end of this cluster, towards the south-west near Buddha Gaya, consists of rude jasper red and white, which rises just above the surface between the Nilajan and Mohane rivers. The hill north-east from thence, called *Dhonggara*, at its north end consists of a white siliceous stone with a fracture intermediate between that of flint and that of quartz, and stained of a dirty red in irregular specks. A small hill west from this is arid white quartz, while Parwariya, north-east from that small hill, is white jasper with red stains. The hill north-east from that consists of white quartz, rather mealy, with a few black specks. The next hill to this, towards the north-east is of quartz or jasper with red stains; and the same continues on the hill beyond the Pengwar called Bhengras. On this has been dug a small quantity of an imperfect Khari or indurated clay, but to so small an extent, and of so bad a quality, that it is not worth attention, farther than as showing one of the ingredient parts of these hills. In the chain parallel to this towards the north-east, between the large hill called Maher and the small hill called Telsanda, the loose stones, for I saw no rock, are of white rude jasper with red stains; while the other extremity of the same ridge called Sobhanath is an aggregate rock of glassy and mealy quartz with red and black specks.

The hill called *Uruya,* which forms the south-west extremity of the Rajagriha cluster is an exceedingly bare rock of a granular jasper, which is sometimes prettily variegated white, grey and red, and takes a good polish, so as to be highly ornamental. The small hill named Karwa, north-west from thence, consists of a red jasper with veins of white quartz, which also promises to be an ornamental stone, although the red parts do not admit of a perfect polish; but that is probably owing to the specimen having been taken from the surface. Adhering to its surface I found a mass of irregular crystals of a very bright white, having a lustre somewhat

between that of quartz and felspar. The hill at Narhat, the N. W. corner of the Rajagriha cluster, is also siliceous. At Jharnaghat on this northern branch of the Rajagriha hills the rock is grey siliceous hornstone, in some places stained red.

A little farther east than Jharnaghat, but on the southern ridge of the Rajagriha hills at Tapoban, the hill consists of quartz and hornstone, and a great deal of the latter, especially that near the hot springs, is red; but the rock does not reach to where these issue from the earth, nor did I observe any stone within several yards of the pools in which the water is, and which I shall now describe. At Tapoban there are five pools considered holy. They are situated in a line parallel to the hill at its foot, and the ground on the plain near them is spouty and wet. Whether or not in a state of nature there were an equal number of springs that came to the surface, I cannot say; but at present the springs are at the bottom of small artificial pools 10 or 12 feet deep. The line of pools may extend about 150 yards, and the quantity of water that issues from each by a lateral passage, is very inconsiderable. On the evening of the 14th of January, the thermometer being at 70° in the air, rose in the easternmost pool to 116°; in the next it stood at the temperature of the air; in the third pool the thermometer rose to 100° in the fourth to 102° and in the fifth to 112°. Except in the last no air bubbles rose from the bottom of these pools, and even in the one farthest west, the number and size of the air bubbles was very inconsiderable, when compared with those which issue from the fine warm springs of the Bhagalpur district. As no person resides in the immediate vicinity of these springs, and as they are visited by the priests only once a year, I cannot say whether or not they undergo periodical changes. The heat being so moderate, the pilgrims bathe in them; and, as the annual assembly had been held the day before my arrival, the water was in a beastly state of filth; but at other seasons it is probably clear enough. It must be observed, that the two middle hot springs, where the thermometer stood at 100° and at 102° contained several small fishes, and many frogs; but that none were to be seen in the two extreme pools, where the heat was 112° and 116°; so that the heat, at which these animals can cease to live

conveniently, is somewhere between 102° and 112° of Fahrenheit's scale.

About three miles east and north from Tapoban, in the same ridge of the Rajagriha hills, there is a recess in the face of the hill, narrow at the bottom, and widening gradually upwards like a funnel; and the view of it has been opened to the plain by the southern side having fallen. Whether or or not this has been the crater of a volcano, I cannot take upon myself to say. There is no peak at the place; the cavity is in the side of a long ridge, the top of which is nearly horizontal, and the cavity reaches from the summit to the bottom of the ridge. There is however no appearance of its having been formed by the action of a torrent. About three miles farther in the same direction, and in the same ridge of the Rajagriha hills, at a place called *Hangriyo,* a very peculiar substance called *Silajit* exudes, and I shall now describe the appearances. The place from whence this issues, is about half way up the ridge, which is exceedingly steep and rugged, and is covered with fragments of quartz and hornstone. Having scrambled over these with much difficulty, I came to the foot of a great rock, in which there was a cave. Immediately below this was a mass consisting of small fragments of quartz or hornstone, imbedded in a white harsh indurated clay like some of the Kharis described in Bhagalpur. The cave has a wide mouth, and may be 50 or 60 feet in diameter, and 10 or 12 feet high, where most lofty. The floor rises inwards with a very steep ascent; and the cave no doubt been formed by large masses of the rock having decayed, or having been changed into the imperfect Khari above mentioned, and having then tumbled down the slope. The roof looks very threatening, and in its crevices shelters wild pigeons; while the cave is said to be an usual haunt of bears and tigers. It is perfectly dry, and near the mouth is cool and airy, but at its further side an aperture, 12 feet wide and four or five high, leads into another smaller cave, the heat and stench in which was so great, that I merely looked in, to satisfy myself that there was no farther opening. On approaching the mouth of this, on a cold morning in January, I was instantly thrown into a most profuse perspiration; but unfortunately I had not heard of any such circumstance, and

I had no thermometer with me. The heat I have no doubt is subterraneous, the stench appeared to me to proceed from bats. I did not see any, but thought I heard them chattering among the crevices of the rock. The rock, in which the cave is, consists of a greyish siliceous hornstone, in some places stained red. The rock of imperfect Khari lying under this cave, and which has evidently fallen from it, confirms strongly the opinion mentioned in the Bhagalpur papers, of Khari owing its change from siliceous rock to the action of heat.

Looking up from before the cave, I saw, about 30 feet above my head, the silajit besmearing the face of the rock, and proceeding from the edge of a small ledge, in which, I am told, it issues from a crevice in the hornstone. It was impossible for me to inspect the place, which is only visited by one old man of the Musahar tribe. Before venturing on the peril, he fortified himself with some spirituous liquor, having previously made a libation to the ghosts (*vira*) of the vicinity. An active young man in my service attempted to follow him. Going along the foot of the rock, they found a projecting ledge, along which, supporting themselves by the roots of trees, they advanced, until they had reached about 40 or 50 feet above the place from whence the silajit exudes. Here the young man's heart failed, while the old Musahar descended the naked rock by little crevices and projections with which he was well acquainted, and, having collected as much of the silajit as he could scrape from the rock in a leaf, he returned by the same way. A very moderate ladder, placed where I stood, would have saved all this danger; but the old Musahar perhaps considered that such a means of facilitating the route might interfere with his gain. I was told that the old man generally ascends three times a month during Paush and Magh, and visits as often another place about a quarter of a mile farther east, which I did not see. He says, that in the season he does not collect above two pounds weight, and perhaps gives no more to the owner, Ray Khosal Singha of Patna, who sends it in presents, as it is considered a valuable medicine.

When fresh from the rock, silajit is of a dirty earth colour, and is always mixed with impurities, that crumble into it from the precipice above. It is then about the consistence of new

honey, and has a strong rather disagreeable smell, although it cannot be called very offensive. When kept in a bottle with a glass stopper for some months, it acquires a deeper brown colour, and becomes thicker; and, exposed to the air, it may soon be made into pills. It seems to be very different from a substance which, in Nepal, is called by the same name. From the hot springs in the vicinity, and the heat of the cave below, I suspect that it exudes from the action of subterraneous fire. The natives pretend that monkies eat it, and attribute the small quantity procured to their depredations; but I think that the circumstance is doubtful, and have no doubt that, with care and a ladder, several pounds might be procured, should it be found useful: but it owes its celebrity among the natives to its being supposed to possess the imaginary quality of an aphrodisiac. When placed on burning charcoal, it swells a little and smokes, and when heated red, is reduced to white ashes without emitting flame. It cannot, I presume, therefore be considered as a bituminous or inflammable substance, the only class of minerals to which it has any resemblance.

On the ridge opposite to Hangriyo, and adjacent to the ancient residence of the kings of India, from whence these hills derive the name of Rajagriha, are two clusters of hot springs, the buildings about which have been amply described in the topography. I shall here confine myself to an account of them as natural productions, premising that the buildings which have been erected very much impede the accuracy of observation. I suspect that those near Brahmakunda have, in a state of nature, been one spring, which has been subdivided, and conveyed by various channels, so as to supply the various pools and spouts from whence it now issues; and in this manner I account for the different degrees of heat observable and for several of the spouts that formerly flowed being now dry. In Brahmakunda, where the water is collected in a pool, in which the people bathe, the water is dirty, but free from frogs. On the 19th of January, the thermometer in the air being at 62°, it rose in the water to 109°. The water from all the spouts is perfectly clear. In that called Kasi the thermometer stood at 107°, in Langga at 104°, in Pangchanan at 94°. These are lower down than Brahmakunda, and probably more remote from the common

source. Among the seven spouts above Brahmakunda, Gautama and Bharadwaja raised the thermometer to 104°, Viswamitra to 100°, and Yamadagni to 102°. At the spout called Vyas, which is the highest, the thermometer rose to 110°. The whole water of these springs, when united below the sacred places, seems to be nearly as copious as the stream from Sitakunda, near Mungger. At the bottom of the hill from whence these springs issue there is a small cool spring. Brahmakunda is situated about 100 feet from the bottom of the hill called Baibhargiri, at its eastern extremity. The rock immediately above the hot springs is a reddish jasper with white veins; but on the same hill, about three-quarters of a mile N.W. from thence, the cave Sonbhandar, described in the topography, has been dug into a rock, of what in the account of Bhagalpur I have called imperfect khari, which is evidently a jasper changing into indurated clay, but not yet arrived at that state. In its colours it entirely resembles the jasper that is adjacent, being variegated red and grey, in veins, layers, and blotches. At the bottom of the adjacent hill Bipulachal are five sacred pools, also described in the topography. Four of them are in one cluster, at the west end of the hill, but on the level. The water in Suryakunda raises the thermometer to 103°, in Santanukunda to 106°, and in Som and Ganes-kundas to 102°. Suryakunda swarms with frogs, which therefore like a heat of 103°; but they shun Brahmakunda, where the heat is 109°. The remaining pool, Sringgirishi is situated at the foot of the hill, about a quarter of a mile east from the others, and its heat is only 97°. The water in all these pools, owing to people bathing in them, is exceedingly dirty.

The lower part of Bipulachal, contiguous to these springs, consists of very small grained hornstone of a grey colour, with veins of white quartz. Above the springs, at a very considerable distance up the hill, is a mine or quarry of crystal (*phatik*). After ascending some way, the rock becomes more granular, is in some places stained red, and in others contains rounded nodules of quartz; and the surface of fissures, and little cavities, are covered with minute crystals. The quartz in the veins of this stone is white and opaque, but has rather an anomalous appearance. The rock, in which the mine is immediately situated, is a kind of crumb-

ling sandstone, surrounded, however, on all sides by the siliceous rock, and divided like it into trapezoidal masses. Some of these masses are white, some ferruginous inclining to red. Among these blocks the workmen have found interstices, from two to four feet in width, and winding in various directions. These interstices are filled with small angular fragments of quartz, generally semi-diaphanous, but stained externally red, and intermixed with a red ferruginous harsh earth. On the spot I was not informed, that this earth was applied to any use; but at Patna I was shown a substance, called *Gabis*, which seems to be the same, and it is said to come from Rajagriha. It is made up in balls, which are used both in medicine, and as a pigment applied to potters' ware, before that is burned. At Patna it sells at from 1¼ to 1½ *man* (76 s. w. a ser) or from about 93 to 110 lbs. a rupee. The quantity said to be brought is so considerable, that although it is a substance similar, and of the same origin with the red earth of the crystal mines, it is probably found in large masses somewhere about the foot of the hill.

The workmen dig out this gravel and earth, and follow its veins 20 or 30 feet into the rock. The dealers in crystal then pick it out from among the gravel, where it is always found in single detached crystals, never adhering either to one another, nor to the stony matter, by which they are surrounded. No large ones have ever been discovered, their size never exceeding that which will make small beads. They consist of an hexagonal prism, terminated by hexagonal pyramids, but the form is seldom perfect. They are seldom thoroughly pellucid, but have somewhat of a smoke colour. This mine has not been long wrought, and 10 or 12 excavations have been made. Crystal was formerly procured from a place lower down the hill, near a temple of Ganes; but since the discovery of the mine just now described, that has been abandoned. I understand, that crystal is also procured at a place called Chakra, north from Saphighat, which is seven or eight miles south-west from Rajagriha, and near Tapoban on the opposite side of the hills. It must be also observed, that the upper part of Ranachal, the hill immediately adjoining to Bipulachal, consists of a sandstone similar to that in which the crystal is found; while the lower part is a red and white jasper, that will be highly ornamental,

if it takes a polish. The east end of the same hill, which is called Giriyak, and on which the ruins attributed to Jarasandha are situated, consists of white, grey, and red granular quartz.

Between Giriyak and Sheykhpurah there is, as I have said, a very large opening, in which I observed no stone, except on the hill of Behar, and that is considerably north from the line; but it consists of exactly the same materials with both clusters of hills, being a granular siliceous hornstone, in most places grey, but in some places stained red. The hill is composed of parallel layers, rising from the east towards the west at an angle of about 20° with the horizon. These layers are from six inches to two feet thick, so that the rock might be considered as composed of horizontal strata. To me it appears, that these layers have been occasioned by cooling, desiccation, or decay, and that the layers have not been formed by various successive depositions. The rock is also, as usual, intersected by two kinds of vertical fissures, crossing each other at nearly right angles. Those running east and west are very wide, often several feet, owing apparently to the action of rain running down the declivity of the hill; while those running north and south are mere fissures. This as I have said, is certainly a rock, which has much the appearance of one composed of horizontal strata; but all rocks of quartz, siliceous hornstone, or jasper, that I have seen, have more or less of a similar appearance, owing to their breaking into trapezoidal or cuboidal masses. The hills of Sheykhpurah are exceedingly rugged and sterile, and entirely resemble in structure those of Rajagriha. The small hill named Barari, which may be considered as the extremity of the ridge proceeding from Maher, consists of jasper, disposed in white and red blotches; and the small hills east of Sheykhpurah, so far as I saw, consist of exactly the same material. The long ridge, under which Sheykhpurah stands, is exceedingly abrupt towards the north, and has a steep ascent from the south. Although split by fissures in three directions, so as to form cuboidal masses, I have no doubt, that at one time it formed a solid mass; yet its various parts have very different appearances. In some parts it is white, in others blackish, in others red, with all manner of intermediate shades. Sometimes the

colours of pretty considerable masses are uniform, at others they are intermixed in dots, veins, and blotches. The red colour, I presume, depends on iron. The black seems to depend on an intermixture of amianthus, for in one specimen the silky fibres were very discernible. In some parts the grain is very fine, and in others the stone is evidently an aggregate, composed of glassy particles intermixed with others, that are powdery.

A narrow band of hills that runs for some way contiguous to the northern face of the principal range, is especially to be distinguished by it having in decay separated into schistose vertical plates, running easterly and westerly; and by a great proportion of it having been converted into the indurated clay, which in the Hindi dialect is called Khari. It rises into various small hills or hummocks near the foot of the great range; but in general is separated from thence by a level space of arable land, and extends through the north-east corner of Sahebgunj, and the north-west of Nawada, having immediately on its north a granitic tract, which is also in many parts very much altered from its primitive appearance north from Majholighat. Khariyari is a small round hummock, deriving its name from the Khari, which it contains. The mass consists of a kind of intermixture of imperfect reddle with hornstone or quartz, which in some places contains fragments of Khari, and in others is stained yellow. The Khari has been wrought in two places. One near the bottom of the hill has formed an irregular nest surrounded by the imperfect reddle, which approaches more or less in nature to the Khari. The derivation of the Khari from the reddle is so evident, that the natives allege, that the one is the other corrupted (Sar). The mine has been conducted with very little skill. The workmen first have dug a narrow gallery into the Khari, gradually descending, until they were stopt by water, and just so high as they could conveniently reach. They have since been under the necessity of beating from the sides and roof pieces, of which every one falls to the bottom, and is brought up with much labour; and in order to be able to reach the roof, recourse must now be had to ladders. The Khari in this vein is harsh and granular, with somewhat of a conchoidal fracture, and consists of various parallel layers, reddish, white, and yellow. It adheres to

the tongue; and when thrown into water, emits many air bubbles, but does not soon become soft or brittle. It comes nearer porcelain clay than any other described in authors. In the upper mine, the Khari forms a superficial vein, which has just been opened, and will probably improve, when it is wrought farther from the surface; as what has yet been dug, contains small fragments of quartz. It has more of a splintery fracture than the other, is somewat greasy to the feel, not at all granular, and it is of an uniform white colour with which it stains the fingers. Like the other it adheres to the tongue, and emits many air bubbles when put in water; but does not soon fall to pieces, nor does it become unctuous. It seems to approach to pipe clay. About a mile north and east from Khariyari is a village named Majholi, which has on each side of it a small hill. The hill to the west of the village has become schistose, and may be considered as in a state intermediate between jasper and indurated clay, showing the transition from one to the other.

The hill east from Majholi has also become schistose, and its plates or strata run from about east-north-east to about west-south-west. A vein or stratum of Khari has run the whole length of the hill, near its middle, and has been wrought about four feet wide, and as much deep. This very much resembles the indurated clay on the summit of Khariyari, but is intersected by reddish veins. The rock adjoining to the Khari on its south side, or towards the great range of hills, shows the transition from hornstone to indurated clay. On some parts of it I observed clusters of minute crystals, exactly resembling those in the slaggy rock of Katauna near Mallipur in the Bhagalpur district. The rock again on the north side of this stratum of indurated clay resembles strongly the kind of porphyritic mass, in which the Khari of Manasachandi in the Bhagalpur district is found; that is, in an argillaceous cement strongly impregnated with iron, it contains many concretions of hornstone and Khari. At Jharnaghat, immediately south from Majholi, and at the foot of the great range is found an indurated clay, evidently schistose in its texture, smooth but not very greasy to the feel, and disposed in various layers, red, white, and yellow. It adheres very slightly to the tongue, and

when put in water crumbles very soon, especially the white layers. Those which are red, resist longer.

At the same place is found an unctuous yellow clay called Pilamati, from its colour. It is used by potters, but the quantity is inconsiderable. It is quite superficial, and mixed with many fragments of rock, which are separated by throwing the whole into a pit, mixing it with water, and stirring it about, until the stones subside. When the water dries, the clay is found on the surface. North-east from the hills of Majholi, at a little distance, is a more considerable hummock called Saren, or Nateswar. It consists of a variety of rocks, all decaying in vertical masses, which run easterly and westerly. In some parts is a Khari, more or less perfect, some of which has been dug, and used for teaching children to write; but it is not of a good quality. Indurated reddle, called *Geru* in the Hindi dialect, composes a still greater part of the hill, but it is inferior to that brought from Gwalior, with which the Sannyasis stain their clothes. The great mass of rock, especially on the north side of the hill, and towards a peak at its west end, has a strong resemblance to that on the north side of the stratum of Khari on the eastern hill of Majholi, but is evidently a very heavy ferruginous slag, containing nodules of quartz and Khari. On the south side of the hill is what I consider as siliceous hornstone impregnated with iron, and disposed in waved layers of various shades of colour, exactly like some Kharis, but very hard; nor has it any thing of a slaggy appearance. East northerly from Saren, is a mass of small hills, through which there is a passage called Dukrighat, and these small hills, being in the same line with the hummocks now described, must be considered as in the same mineral range. They consist, it is true, of an exceeding tough siliceous hornstone, composed of different thin layers of various shades of grey, and of a very fine grain. It seems to be very clear, that the hill of Khariyari, that west from Majholi, and the southern side of the eastern hill of Majholi and Saren were once entirely similar; but have been changed by the action of fire. The northern side of the two last-mentioned hills may have been similar, although this is dubious, as they are immediately contiguous to granitic hills; but at any rate they have under-

gone a stronger heat, part of them having been converted into slag.

THE HILLS CALLED BARABAR, ETC.—The third great cluster of minerals consists chiefly of granite, and its central and more perfect part is what Major Rennell calls the Currumshah hills from Karnachaupar, an antiquity which they contain. Two wings are detached; one to the east, which, at Dukrighat above mentioned, joins the second great cluster on its north face, and the other to the south, comprehending the detached hills round the town of Gaya. I conclude these wings to belong to the same cluster, because in some places the granite is perfect, and the great mass has an imperfect granitic appearance, although there are several other substances intermixed, and the changes, which the two wings have undergone, differ a good deal. I shall therefore describe the centre, and then the two wings.

The centre consists of a great many detached granitic rugged peaks, extending from Dhol on the north to Kauyadol and Keni on the south, and from Hathichor and Chutiya on the east to Kharna on the west; and by the natives, so far as I could understand, is collectively called Barabar. That name is indeed also applied to one of its peaks, usually called bara (*great*) Barabar, although the peak called Suryangka seems to me higher, and forms a part of a large cluster; while Kauyadol is a detached peak of the most tremendous abruptness, and much more grand than the great Barabar. The whole of this central cluster consists of perfect granite, without any vestige of stratification, but differing a little in different places. At the east end of Bhayangk, near the north end of the cluster, the granite is small grained, with white quartz and felspar, and a good deal of powdery black micaceous matter. At Dihiri, the west end of the great mass, the grains are smaller, and the whole is powdery. In Kauyadol it is very fine, the grains being larger, and little or none of the ingredients being powdery. At Satghara, where the caves have been formed, the granite is still finer, most of the quartz being glassy. In the caves I saw some granite in which the felspar was red; but could not perceive any rude block of that colour. At the cave of Nagarjuni, the east end of the great mass, the granite is exactly similar.

The only extraneous matter found among these central

hills is iron ore, found in small masses lying loose at the bottom of Suryangka hill. Its internal fracture, except in colour, so much resembles granite, the shining faces of the felspar still remaining entire, that I have little doubt of its having been originally masses of that stone, changed into ore by some operation of nature, perhaps vapours from below, just analogous to what I have mentioned in my account of a mine in Mysore (Mysore Journey). The wing extending from this central part towards the east, comprehends a number of small detached hills, reaching from Saphneri on the west to Bathani on the east. This last hill, which approaches close to the hornstone of Dukrighat, is a granite, as perfect as that of Barabar; but the other hills, though they consist chiefly of granite, contain much extraneous and some valuable matter. Great confusion prevails concerning the names of these hills, various names being often applied to the same. I shall begin with a small ridge towards the north-west, which consists of three hills forming a chain, and united at the base, and of a small detached hummock at their east end. That furthest west is called Saphneri, that in the middle is called Najara or Mahakar, and that furthest east is called Tarbigha or Dharmapur. These hills, although they consist entirely of stones and rock, with a little mould in the crevices, are not near so rugged as those of proper granite, the masses being small, and the interstices filled with earth, so that one may walk on them with ease. Neither have they any of the abrupt precipices so common in rocks of siliceous hornstone or quartz, yet they lie in a direct line between the little hill called Keni, in the central granitic mass, and the small hummock at their east end, both of which consist of the most perfect granite disposed in great rugged masses, and entirely similar to that of Nagarjuni; nor have they the smallest appearance of stratification. Tarbigha is remarkable for a quarry of stone marl that is on its northern face, less than half way up the declivity. Below the mine the rock is a grey siliceous rock, with somewhat of a conchoidal fracture, like a hornstone; but appears to contain in it many small masses of felspar of the same colour, and clusters of black dots. Above the quarry the rock consists of similar materials, but the proportions are reversed. The black matter composes the basis, and the hornstone or quartz is the smallest ingredient. It admits of a

tolerable polish. The marl forms a large bed or nest, the extent of which has not been ascertained; but the excavation is very inconsiderable. It is perfectly white, dissolves entirely in acids, and is more friable than chalk, but much harsher. It will not, like chalk, make a mark on wood; but stains the fingers. It is used for white-washing houses. It is said by all the people in the vicinity, and even by one of the men who was employed, that Mr. Law, formerly Collector of this district, attempted to make porcelain of this substance, and that at a great expense he succeeded in forming some vessels. It is scarcely credible that any gentleman should have undertaken such a manufacture, who was so entirely ignorant of its nature; and I am therefore inclined to suspect that Mr. Law used the Khari, and not this substance; and the Khari, as I have said, is found at no great distance. I was at the utmost pains to ascertain the point; but the natives from very different parts uniformly agreed, that the marl was the substance employed, and ever since it has been called *China-mati*, from the name Mr. Law used for porcelain; while formerly, it is said, it was called *Chuna-mati*, or Lime-earth. This marl, like chalk, contains siliceous nodules; but they are not flint; they are an aggregate entirely resembling the rock below the marl. In some places the rock, immediately adjacent to the marl, is in a state of decay, and in the transition, from the hornstone aggregate to the marl, has become an imperfect steatite, called *Khungta* by the native druggists. At the foot of these hills, as well as in the central cluster, are found on the surface loose nodules of iron ore.

South from this little ridge are two detached hills, Teturiya and Dhanmauya, which have entirely a similar appearance; but I did not examine their contents. South again from these is a small hummock, called Chuniya, from its containing a similar marl. The mass here is granite, which surrounds the marl on every side. This latter substance is in a large superficial nest, and entirely resembles that found in Tarbigha, as do also the siliceous nodules found immersed in its substance. It is said that the bridges of Phatuha were originally built with lime prepared from this marl, which would no doubt be good enough. A little south from Chuniyapahar is a small smooth heap of earth, all round which

are lying, on the surface, fragments of iron ore, like those at the bottom of Suryangka and Tarbigha. Immediately south and east from this is a hill, extending about a mile from east to west, and called Bhaluya, from its abounding in bears. It consists chiefly of granite, the greater part of which entirely resembles that of Nagarjuni, and is called Urdiya by the workmen; but some, which has rather a conchoidal fracture, more resembles the stone from the upper part of Tarbigha, although it contains less black matter, and seems to consist of white quartz, white felspar, and granular hornblende.

Near the west end of this hill, about 12 years ago, were discovered three quarries of a very heavy blackish potstone, called by the workmen *Sungmusa*, or the stone of Moses. It was discovered on the surface, and the veins have been followed to a considerable depth, as many vessels of this material are made at Gaya. The veins sink with a considerable angle from the horizon, and are covered by a marl 10 or 12 feet thick. The potstone consists of masses never larger than a cubit in diameter, and covered with a grey crust. It differs chiefly from hornblende in being softer and finer grained; but, like it, contains many small shining plates, or imperfect crystals. It takes a polish, but very inferior to that of marble in lustre. One of the quarries is now entirely filled with water; for the natives have no idea of driving a level, much less of raising the water by machinery. Another has sunk 20 feet deep, and the sides falling in have killed one man, and disabled two. The marl here is exactly similar to that of Tarbigha and Chuniya, but rather harsher. I searched both very carefully, and inquired most particularly at the workmen for marine exuviæ; but could neither find the smallest trace, nor hear that any such had ever been observed. There is so little demand for the marl, that the ascent to Chuniya being easier, no one takes it away, and its removal from above the potstone is attended with a heavy expense; for it must be carried up in baskets on men's heads, by the steep ascent left in digging the quarry; as the cutting a level road is a mystery far beyond the reach of the miners. The difficulty in cleaning the quarry is very much increased by large siliceous masses, which the marl contains, and which are often four or five feet in diameter. These are dragged out with ropes, at a very great expense. They consist of materials somewhat

similar to those of the nodules found in the marl of Tarbigha, that is of a white hornstone, in which are disseminated small masses of white felspar and some blackish or dark green micaceous matter; but this, instead of forming dots, as in Tarbigha, forms large irregular blotches. Very ornamental pieces might be procured, as it takes a fine polish.

South from the hill called Bhaluya is one pretty similar, but its greatest length is from north to south. Its proper name would seem to be Jhara, but on account of a quarry that it contains, it is most usually known by the name of Patharkati. It is very rugged, and consists chiefly of granite; but its southern end is of a different nature. The greater part of this consists of a rock very much resembling the potstone of Bhaluya, but much harder and in larger masses, although it is intersected by many fissures. It has a conchoidal fracture, and may be considered as a hornstone impregnated with hornblende. It is called the black-stone (*kala-pathar*), and is used for making pestles and mortars, for which it is well fitted. There is besides a very fine quarry of the best hornblende that I have seen. It was used for building the Vishnupad at Gaya, and, it is said, has been in use since the time of Harischandra, a prince of the golden age (*Satya-yug*), whose son Rautas built the fort, which Major Rennel calls Rotas. Harischandra was a great worker in stone, and is said by the workmen here to have first tried the Barabar hills; but, having found these too hard, he then went to Alura in the south, and dug there the celebrated temple of Buddha. At present there is no demand for this stone; but very fine masses might be procured. Its crystals are large and distinct, and it is heavier than usual; but it does not admit of a fine polish.

Respecting the hills near Gaya, and commencing with the little cluster near Pretsila, and part of this wing nearest the centre, the highest and sacred peak, although almost a mere rock, is not near so rugged as if it had been composed of proper granite; and, in fact, although it is an aggregate rock, the greater part of it has much the appearance of a siliceous dark-coloured hornstone, in which are disseminated small fragments of felspar. In other places, again, the granulations are more distinct, and white quartz, a black powdery matter and felspar are evidently the component

parts. The small peaks at the bottom of the hill are clearly granite, although not good, and are vastly more rugged than the principal hill. The large hummock of Kewanipur at the south side of this cluster, consists of a very strange stone, which has a good deal of the conchoidal fracture, and is exceedingly difficult to break. It has no appearance of strata, and consists of fine grains variously coloured, and the colours in general disposed in patches like many jaspers, to which on the whole it has the greatest affinity. Some parts are of a blackish grey, with black dots intermixed; others consist of white and blackish grains, and others with the black are composed of grains which are rust coloured. In some parts the black grains are pretty equally disseminated; in others they are conglomerated into irregular spots.

The rock of Ramsila very much resembles that of Pretsila, being somewhat intermediate between granite and hornstone. It consists of three substances, one black and powdery, another greyish and splintery, and a third shining like felspar; but the hill is not near so rugged as those of granite, and the rock, like hornstone, is divided into cuboidal masses by fissures vertical and horizontal. The hill, at the east end of which the town of Gaya is situated, consists of various peaks and hummocks, composed of many different rocks very strangely intermixed. The view which I could take of it was superficial; but I have seen no place, an accurate study of which seems more likely to throw light on the various forms which, what are called primitive rocks, have assumed. The greater part consists of an imperfect granite, inclining more or less in its appearance to hornstone, like that of the hills to the north just now described. In some places this would appear to have been impregnated with hornblende, as it is very dark in colour and exceedingly difficult to break. In some places, again, that which has in most respects a very strong resemblance to hornstone, contains many small black and shining dots, as if it were a very fine grained imperfect granite. In others, again, both imperfect granite and hornstone have degenerated into a kind of sand-stone, the former spotted, the latter of an uniform white. It must however be observed, that at the east end of the hill there are large solid rocks of a perfect grey granite: immersed in one of these at Bhimgaya, is a large mass of siliceous hornstone, the two

substances being in every part perfectly contiguous. In other parts of these hills there are large rocks of quartz, white, glassy, &c. The most remarkable is a hummock, west from Brahmayoni, the masses of which have, in decay, the appearance of vertical strata; they are partly red, partly white, with a few greenish portions, and, it is said, may be cut into seals. Perhaps they may approach in their nature to cornelian, as they have a greasy appearance and admit of a polish; but all that I saw was full of rents. West from thence, the imperfect granite and hornstone is decaying in vertical schistose masses; but wherever the rock is entire, there is not the slightest appearance of stratified matter or arrangement. At the small hill called Katari, a little west from the above, is a quarry of indurated reddle (Geru), reckoned of a good quality, and used to stain the clothes of the Sannyasis, as well as a paint. Various other pursuits prevented me from visiting this place.

Minerals of the Plains.—Having detailed the minerals of the hills, a few sporadic substances that are found scattered through the plains may be mentioned.

The channel of the Son river is celebrated for the pebbles it contains, many of which are very ornamental, and take a high polish; but by far the greater part consists of water-worn fragments of rude siliceous rocks of various kinds, chiefly however quartz, both diaphanous and opaque, and of various colours. All the pebbles have probably been brought from the southern hills by the stream of this mighty torrent. It is however alleged that the water of the Son has a petrifying power, and that bones, old leather shoes, cow-dung, bricks and various pieces of wood have been found converted, either wholly or in part, into stone; but such, if they really exist, must be scarce; as, after a careful search, I offered high rewards for any such specimens, without the smallest success. If I am right in supposing that these pebbles come from the hills, the part of the river that I visited being near its mouth, must afford bad specimens; and, in fact, among many thousands that my people collected, I procured none that are fine: in general they entirely resemble those found scattered on the Rajmahal hills, but there are some differences. In the Son pebbles I saw much less crystallized matter, and the crystals are very imperfect,

and generally shot together in a confused mass between two plates which meet at an acute angle, and are so conglutinated together as to form a solid mass, admitting of polish. The concentric layers in the Son pebbles are generally waved, and angular; but I never saw among them masses containing several concentric nodules immersed in a common mass. In the Son pebbles also, the surfaces are not so curiously pitted, although there are traces of this circumstance. Again, among the Son pebbles there are many with a red tinge, and with dark-coloured or green dendritic veins, or that are clouded, which I did not observe in those of the Rajmahal hills. I found also among the pebbles of the Son, some that admitted a polish, but that were perfectly opaque; some were of one uniform colour, partly red, partly green, and partly yellow; and, could perfect specimens be procured, they would be very ornamental; but all that I could find contained flaws, and the same is the case with those which consist of several colours, chiefly black and yellow, partly disposed in bands, partly in dendritic veins, and these last have a strong resemblance to the pebbles of Egypt. In the bed of the Son, along with these pebbles, I found a pumice-stone larger than the fist, and undoubtedly a volcanic production, which strongly confirms the idea that the pebbles of the Son have been brought from the southern hills, and that these hills, like those of Bhagalpur, have undergone the action of volcanic fire. In a great many parts, but scarcely anywhere but near the banks of rivers, calcareous nodules are abundant, and are burned for lime. They entirely resemble those found in Bhagalpur, but here are called *Gangti* and *Ghanggat.* I have nowhere in these districts found the calcareous tufa (*Kangkar*) forming large masses; although these nodules are a mere indurated carbonate of lime, the pilgrims from Bundela fry them in their curries, thinking that they thus improve the flavour of this food, which is probably imaginary.

At a village named Tal, about six miles east from Daudnagar, a substance used in medicine, and called *Mus*, is found in small detached masses, which have a strong resemblance to the ferruginous slag, that comes from the furnaces of the Kol in Bhagalpur; and in fact near the village there is a large elevation said to have been an abode of that people; but

there is in the vicinity any iron ore, that could have been smelted. There is no doubt, that this is a metallic substance, but from its lightness it probably contains much sulphur or arsenic, although thrown on the coals it emits no vapours, and I have to regret, that my means for analysing it are so slender, as not to leave room for forming a rational conjecture on the subject. The Mus is found in a small field perhaps 30 yards square, that is every year cultivated. Two men, that I procured to dig, said, that it was found about a foot below the surface mixed with the soil, and that they never dug deeper, as the small quantity required was readily procured without farther trouble. Accordingly in digging a hole, about three feet square, to one foot in depth, they found three or four pounds of this substance mixed with a sandy soil. I then directed them to dig to three feet in depth, the soil, as they descended, becoming stiffer. After the second foot the quantity of Mus diminished, and at the depth of three feet, I found none. To be certain however, that none is found lower, would require a more extensive search than I made. The people say, that none is to be found, except in this field, and that within it, on digging such a space as I opened, they never fail to find some; but whether from thence we can conclude that it is regenerated, would be rash to say.

In many places of Behar, I am told, there is a saline earth, from whence a culinary salt named Dar, is prepared; but, the business being illicit, I could not discover the places, where the earth is found. I have however little doubt, that this Dar is exactly the same with the Beldari Nemak of Puraniya, as the process for its preparation is exactly the same. The saline efflorescence, from whence nitre is made, is common in the villages of these districts; but is never found except in villages, where it appears on the lower part of mud walls, and on the sides of roads, that are impregnated with animal impurities. This saline efflorescence consists always of nitrate of potass and muriate of soda intermixed; but even in the same village in very different proportions. The nitrate in general predominates; and the efflorescence, in which this is the case, having a disagreeable taste, is usually distinguished by the name of Noniya matior (or saline earth); but in some walls or spots the muriate is by far the most predominant; and, its taste being more palatable, it is called Mitha

mati or sweet earth. The muriate being an object of contraband manufacture it was after a very troublesome investigation, that I was enabled to ascertain this circumstance; but I have not been at all able to discover what circumstance occasions the different proportions of the two salts. It is only known, that it depends upon some local circumstance, the same spots in the same season always producing the saline matters in nearly the same proportions; a wall, that at one scraping gives mitha mati, at the next never produces noniya; and on the contrary, that which has once produced the latter, never is found to produce the former; but after a rainy season the nature of the produce is sometimes changed.* I shall have occasion, when treating of the manufactures, to return to this subject.

In many parts of the district of Behar soda effloresces on the surface of the earth, in soils that are called Rehera. It is confined, so far as I heard, to the divisions of Sheykhpurah Nawada, Sahebgunj, Daudnagar, and the northern part of Jahanabad. Some people went from the latter to Tirahut, and procured instruction how to prepare the saline earth into cakes of soda, such as are usually sold at Patna. They continued to work two years, when the supply of saline earth became so scanty, that a continuance of the operation occasioned loss, wherefore the manufacture was abandoned. There can however be no doubt, that in the places where originally found, the generation of the soda continues; and in the very places, that were exhausted by too frequent scraping, the washermen of the vicinity now obtain a supply sufficient for their demand. Wells, I am assured by the natives, have been dug in these places, and at the depth of 10 or 12 cubits from the surface contain water that is perfectly sweet. In the Sahebgunj division, the soda is found efflorescing at Chakan about seven miles north from the Thanah, and at a little distance west from the Phalgu. It is scraped by the washermen, who assure me, that the same surface that was

* It is alleged, that nitre is never formed, where the soil is a stiff clay, and that westerly winds contribute to its generation. With an east wind a place that has been scraped, requires a longer time to be covered with the saline efflorescence, and the earth procured gives less nitre than that, which has effloresced during the prevalence of a west wind.

scraped, is again covered with a new efflorescence in from 8 to 30 days, according to circumstances. Easterly from Chakan, and about four miles east from the Phalgu, is a small uncultivated plain, about 300 yards diameter, through the middle of which a small rivulet winds. Soda effloresces on many parts of its surface; and, after being scraped by the washermen, is renewed in 10 or 12 days; but the quantity procurable in a year would be trifling, as the efflorescence takes place only in certain spots, which are of very irregular shapes.

In the Nawada division, some way south from the town of that name, is one of the most extensive places for procuring soda, that I have seen in Behar. It extends above a mile in length, by the side of a canal used for watering the fields; but is very narrow. The surface is carefully scraped by washermen, and by those who make glass. In the Sheykhpurah division the soda is most plenty, especially in the grams of Gokula Bawai and Lachhuyara, and is scraped by the washermen and glass-makers. The former give it no preparation, I shall afterwards have occasion to return to the management of the glass-makers. Many of the wells in these districts contain a saline water *(Kharapani)*, especially near the Ganges, and other rivers, and particularly in the vicinity of the town of Behar. This water has rather a mawkish than a saline taste, but is exceedingly disagreeable to drink, although it is considered as favourable to vegetation, and is preferred to all others for the irrigation of gardens. In a well belonging to a house, which I occupied in Patna, this impregnation was very strong, and all in the vicinity of the gutters, into which it was poured to be conveyed through the garden, formed in the heats of spring a saline crust, which has saved me the trouble of procuring the salt by evaporation. It effervesces with acids, and is probably soda. At a little distance from rivers the water of the wells in these districts, is in general very good, although often found in clay even of a loose black nature. It very often happens, that after digging far through clay, the people neither procure water, nor come to any change of substance. In this case they expect, that the water will rise with a rush (bhur), and in order to escape the inconvenience of this, a stake is driven into the bottom, and pulled up by a rope, when the workmen have come from

the well. This sudden gush is expected, whenever the workmen have dug somewhat below the depth, at which water is usually found in the vicinity, especially when the whole substance dug through has been a clay of one kind.

Potters' clay is found in most parts of the district in abundance, and tolerably good, that is to say, it makes strong rough unglazed vessels. It is in general a blackish smooth clay, and contains small pebbles. I have already mentioned the red and yellow clays found in the second and third clusters of hills; but at Phatuha, on the bank of the Ganges, there is a bed of a fine pale yellow clay called Rapura or Gori mati. It is about four or five feet under low water mark, and perhaps 16 or 18 under the surface of the country. It is about 200 yards in length and six feet in thickness. It is a smooth, light, unctuous clay, and contains many cylindrical cavities, as if it had been perforated by worms, or the roots of plants, but no remains of such bodies can now be observed. Considerable quantities are used in Patna, and the vicinity, as a wash for the mud walls of houses; and it is said, that an essence is procured by its distillation, which is used to impregnate the essence of sandal with a peculiar flavour.*

* The mineralogical portion of the survey has been given entire, and when combined with the sections on the same subject in the other districts, the vast mines of wealth which India contains beneath the soil will be fully made apparent. Many of the facts stated will appear very strange to geologists.—[Ed.]

CHAPTER VI.

VEGETABLE KINGDOM, AGRICULTURE, ANIMALS, ETC.

ARTICLES CULTIVATED.*—Near the river a great deal of the land gives two complete crops in the course of the year; but in the interior, unless we include the Khesari sown among the stubble of rice, the whole producing two complete crops in the year does not exceed one-eighth of the arable land.

One-half of the rice land in the interior gives a crop of Khesari (of the Bean tribe), sown without any cultivation among the corn, when that is near ripe. Except Khesari there is little sown without cultivation, and this careless practice is entirely confined to the low inundated parts at a little distance south from the Ganges, and seems to be rapidly on the decline, being a very bad economy.

CULMIFEROUS PLANTS.—Rice everywhere, except on the immediate bank of the Ganges, is by far the most important crop, and much attention has been bestowed on its cultivation. By far the greatest part of the rice here is the Aghani or Khurif, which ripens in winter.

Rather more than a half of the winter rice is sown broadcast, after the commencement of the rains, and on the lowest lands. A great deal of the seed is made to sprout, before it is sown, and seed managed in this manner is here called Neocha or Angkur. The seed, which is sown early in the season, is not prepared, and is called Kharwa; that which is sown late is sprouted, which saves time. Dibbling is not in use. The broadcast winter rice of Behar is not near so coarse as that of Bengal. The ears only are removed in reaping, and the stubble is seldom cut, except when wanted for thatch; and as a large proportion of the broadcast rice has Khesari sown among it, the straw is entirely lost to the cattle. Where there is no Khesari, the cattle devour greedily, whatever is left on the field.

The transplanted rice is all fine, such as is usually sold as

* The tables given in the Appendix, shew the extent and nature of the cultivation of the district.

that of Patna; but the very finest called Basmati does not exceed one quarter of the whole, and is not of such an excellent flavour as the Basmati (pregnant with perfume) of Barelli; but it is an article of exportation, for which at Calcutta there is always a great demand. Most of the seed for transplanting is sown after it has sprouted; and the harvest is conducted in the same manner as that of the broadcast rice. It is not here the custom to lay down the rice, before it is reaped.

The fine rice that is exported, and what is used by the high castes is mostly freed from the husk without boiling; but boiling is employed in the operation by the poor. Except a very few great families almost all the Zemindars and farmers beat in their own houses whatever rice is required for family use; for they all rear this grain. The labour falls on the women; but most families in easy circumstances, and of rank have slave women. In the country the wives of artists and tradesmen, who have no farms, purchase rice in the husk, and beat it. What is intended for the consumption of large towns and of travellers, and for exportation, is purchased in the rough state by the low traders called Baldiya-beparis, whose wives beat a great part of it, and hire some poor women to assist. Very little therefore is in fact beaten for hire, and the rates vary a good deal. The beater always receives by weight a certain quantity of rough rice, and returns a certain quantity of clean, taking for her profit whatever surplus there remains. At Patna the rate differs somewhat according to the quality of the grain. If the rough rice is of a very good quality, when it is cleaned by boiling, the cleaner receives 60 sers [a seer is about 2 lbs.] of well winnowed and dry rough rice, and delivers 40 sers of cleaned. But with common rice the beater receives 65 sers of winnowed and dry rough rice for the 40 sers of clean. The women, who live by this business, usually work three together, and commonly clean two rupees' worth in a day, when the rice is cheap working hard, and when it is dear, giving themselves less trouble; but the annual difference, that takes place in the price between harvest and seed time is in some measure compensated by the new rice being easier to clean than the old. If the rice here is as good as that with which I tried the experiments mentioned in the Dinajpur papers, and of this there is little reason to doubt, the women will have

the following wages. According to these experiments, four parts by weight of rough rice give three of clean, but the beaters return only a $\frac{40}{65}$ or 0.6154 part, they have therefore for their trouble 0.1346 of 2 rupees a day, that is rather more than 4 anas $3\frac{1}{2}$ pais, or 15 Paysas, or 5 Paysas each, while 6 Paysas are the days hire for a hard labouring man.

When rice is cleaned without boiling, an addition of $2\frac{1}{8}$ sers on 40 of rough grain are allowed. As much rice is here cleaned in this manner, I tried a set of experiments on this subject, similar to that mentioned in my accounts of Dinajpur, the result of which is given in the Appendix. Although it will appear, that the average weight of a cubical foot of rough grain is considerably heavier than that with which I tried the former experiment, yet the produce in clean grain is considerably smaller, and a larger proportion of this consists of broken grains. According to the average result the beaters would return fully the whole of the entire grain which they procure, and would have for their trouble only the broken grains. Allowing the price of rough rice to be, as usual on an average, 70 sers (76 s. w.) for the rupee, the three beaters will have daily 9,936 sers of broken grains, which may sell at the rate of 40 sers a rupee, so that they have for their labour $14\frac{9}{10}$ Paysas; but if they use the rice, they have a great deal more nourishment, 3,312 sers (lb. 6 oz. $2\frac{3}{4}$) being a sufficient allowance, as a full diet, for three labouring people, including both grain and seasoning. The bran and husks give also a small profit; when the rice is cleaned by boiling, they do no more than supply pots and fuel.

Rice is very seldom prepared in any other manner than by plain boiling, and the water in which it has been boiled, is actually thrown away; but in towns it is given to the milch cows, that are stall-fed.

Next to rice* the most important culmiferous crop is wheat. The only kind, that I examined, was Triticum Spelta, although some of other kinds may have escaped my notice. The greater part is watered, and is sown broadcast; but in good clay lands the watering is not necessary, and in some places,

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* The grains, plants, &c. are noted in succession, according to the priority in quantity which they occupy.—[Ed.]

where the clay is very stiff, it is considered prejudicial. In light soils watering is absolutely necessary. Wherever it is not watered, the wheat is sown in drills; but where watered, it is sown broadcast. The wheat, which grows on sandy land, is reckoned much the finest, and is called Dudhiya-Gehunj; while the coarse grain, which grows on clay, is called Desiya-Gehung. In all the principal towns the fine kind of flour called Mayda is sold in the market; and both Hindus and Moslems use fermented bread, baked after the Hindustani fashion. That baked in the European manner is sold at Patna and Danapur, but not at Gaya, where gentlemens' own servants bake, what their masters require. Both the flour and bread of these districts are uncommonly fine. By far the greatest part however of the wheat is used either in unfermented cakes (Roti), which, if fried in oil, are called Puri; or it is used in various sweetmeats fried in ghiu (butter) or oil.

Wheat and barley are often sown intermixed, and reaped together. The mixed grain is called Gujai. This is both made into coarse flour without being parched (Ata,) and is formed into cakes (Roti); and is sometimes also parched, then ground, and mixed with cold water and salt, or extract of sugar cane to form a kind of unboiled pudding (Chhattu). Wheat straw in reaping is cut near the root as in Europe, and preserved as fodder.

Barley is partly mixed with wheat, partly by itself, and partly mixed with pulse. Barley is sometimes made into meal without being parched; at other times before it is ground it undergoes that operation. In the former case it is made into unleavened cakes (Roti), and in the latter it is used in the form of unboiled pudding (Chhattu); but the latter is the most common. Here barley is sown intermixed with two kinds of pulse, pease, and But, and the former mixture is called Jaokerao, the latter Jaoberra. Barley straw is preserved as fodder for cattle in the same manner as that of wheat.

Maruya, or the *Eleusine Corocanus*, is raised entirely as a summer crop; but part is sown broadcast, and part is transplanted. The latter is the most common, and is chiefly reared on the ground, that afterwards gives a winter crop, which is watered from wells. This seems everywhere to

have been the grain that was formerly used in such cases; but near the Ganges maize has been introduced in its stead; and it is to be regretted, that the practice has not yet extended into the interior, as the produce of maize is larger, and there can be no doubt, that the grain is better, although as yet the natives give a higher price for the maruya. This grain is chiefly used in unleavened cakes, but is occasionally made into unboiled puddings. The straw is preserved for fodder.

Maize as yet is confined almost entirely to the banks of the Ganges. The stems both green and ripe are given to cattle, but the former only are thought good. The natives are very fond of the grain, when quite young, parched in the cob. A species of *Paspalum*, mentioned in Bhagalpur account, is supposed to be of two kinds, male called Kodo, and female called Kodai. The former is by far the most common. Both are sown at the same time, but the Kodai ripens rather earliest. The greater part is sown on high poor land intermixed with Arahar. Some fields of it here also have an intoxicating quality, and it is said, that even those who reap such fields become intoxicated during the operation. It has been already mentioned, that a particular kind of lameness may be perhaps attributed to the use of this intoxicating straw; but more people think it owing to the use of Khesari; and the poor very generally sleep on the straw of Kodo in winter, as it is softer and warmer than rice stubble. Cattle eat it, but it is not thought good fodder. The grain is boiled like rice. A good deal of Kangni (*Panicum italicum*) is reared in high lands near the villages. It thrives best in a mixed soil.

About the same quantity of the *Holcus* called Janera is cultivated, but the culture of this grain is confined to the banks of the Ganges, where it grows luxuriantly, while the Kangni, being spread over the whole country, makes little show. In order to distinguish it from maize, it is usually called Gehungya (or wheat like) Janera; and it is divided into three kinds, Raksa, Masuriya, and Narkatiya; but I have not been able to ascertain exactly, to which species of *Holcus* each of these belongs. In fact there seems to be great reason to suspect, that three or four of the kinds of *Holcus* distinguished by botanists, are much more nearly

allied to each other than the different kinds of rice which the learned choose to consider as belonging to one species. It seems here also to be rapidly giving way to maize. It is often planted in a row round the fields of maize, as a kind of hedge.

Next to the Gehungya Janera, the most important of the culmiferous crops, is the kindred plant called Sama or Kheri in Puraniya and Bhagalpur.

China, or the *Panicum-miliaceum* of botanists, is here the least considerable of the culmiferous grains. Here there are only three crops, Jethuya, Bhadaiya, and Maghra, so called from the months in which they are reaped. In these districts China is used at marriages, but is not considered as so indispensibly necessary as in Bhagalpur.

Leguminous Plants.—The greatest leguminous crop is Khesari (*Lathyrus-sativus*), the quantity of which sown among rice stubble is very great, and in the inundated land some is sown by itself without previous culture. All through Magadha this grain is the common material for making curries; but the poor also use it for cakes fried in oil (*bara*), or parch it, reduce it to flour, and make it into little balls of paste, which are fried in oil. All these preparations are only used as a seasoning with rice, or other culmiferous grains. This pulse is considered as remarkably unhealthy, and a Bengalese would give himself up in despair were he compelled to use it for a few days, even as a seasoning for his food; but this seems to be a mere prejudice, the poor people here being much more healthy than the Bengalese.

The But or *Cicer arietinum* is generally sown on land which the people cannot water, either from want of reservoirs or industry, and which gives no other crop in the year; and such a crop may be always considered as a proof of bad farming; because this grain might be always raised as a second crop, either sown among rice stubble, or after some of the culmiferous plants that come to maturity in the rainy season. Accordingly it is chiefly reared near the Son, and in the southern parts of Sheykhpurah, where the system of agriculture is very bad. A great deal is exported, and the price has of late been enormously enhanced, probably owing to much less being now raised, as with industry other crops are, no doubt, more valuable. The variety called Kabali-but, which

has a white flower, is very scarce. That most generally cultivated has a red flower, and is most commonly called Chana.

Some pease are sown on the mud of inundated lands, as the water retires; some are sown among standing rice to grow after that has been reaped; some are sown mixed with barley, and forms what is called Jaokerao; some is sown on watered land, as a winter crop, intermixed with various other articles. These are by far the best. Peas by the natives are used either split (*dal*), or made into flour, and all the meals of unparched pulses are here called *besan*. From the meal of peas are prepared sweetmeats, and paste balls (*bari*) for curries. Peas are also used alone for food, either parched or boiled, and eaten with a little salt.

The lentil (*Ervum Lens*) is only of one kind, called Masur. It is only used in curries, either split or made into paste balls.

The Kuthi, or Kurthi (*Dolichos Biflorus*); Arahar, (*Cytisus Cajan*); Mung,* or Sehamung; Bringghi (*Phaseolus Aconitifolius*), and Urid (*Kutu Ulunu*) are next in importance.

Plants producing Oil.—By far the greater part of the oil in these districts is produced from cruciform plants, of which three are in common use; but every thing concerning their nomenclature is in the utmost confusion.

Next to the cruciform plants, linseed (Tisi) is that most cultivated for its oil; and the retailers of oil are very generally accused of adulterating the Tiru oil with that of linseed, which is much cheaper.

Til or Sesamum is raised in very considerable quantities, especially mixed with Janera on the banks of the Ganges.

The *Ricinus*, called here *erengri*, does not occupy so much ground as the Sesamum; but, as it is generally sown by itself, the produce is much greater. Fine oil for burning and medicine is in Patna extracted from this seed by expression alone. The seed, as in Bhagalpur, is first freed from the integuments, and then reduced to a paste by beating it in a mortar. This paste is then put into the common oil-mill, and pressed in the usual manner: 40 sers of seed give from 7½ to 8 sers of oil, both by weight.

* The term Mung is applied to several varieties of the *Phaseolus*, which have a hairy legumen.—[Ed.]

Some circumstances of management common to the cultivation of the country may now be mentioned.

There are reckoned three harvests:—Bhadai, reaped in the rainy season, including broadcast rice, maruya, maize, &c.; Khurif, reaped in the cold season, including transplanted rice, janera, &c.; and Rabi, reaped in spring, including wheat, barley, linseed, peas, &c.

Reaping and thrashing are not here considered so disgraceful as in Puraniya and Bhagalpur; and persons of the high castes, when poor, do not scruple to acknowledge that they perform these labours on their own lands. The rates, which are given in 11 remarkable vicinities to the ploughmen for reaping and thrashing, and which are allowed to the tenant as the expense of harvest, vary from 32½ sers on 432½ at Behar to 52 sers on 352 at Gaya, that is, from 7½ to 14¾ per cent.; but the general average is 11½ per cent. The general average to day-labourers, for reaping alone, is 5¼ per cent. The whole grain is trodden out with cattles' feet. In some places the grain is preserved in pits (*khads*) through the whole year, which is of the utmost importance as a security against fire. Rich people usually keep their grain in round mud-walled stores covered with a conical thatched roof, such as are called Maruka; while the poor use the vessels of unbaked clay, called Kothis, or large straw baskets. All the crops called Rabi, which are reaped in spring, must in the rainy season be surrounded by wheat or barley straw, otherwise they spoil, and are filled with weevils.

The account given of the profit on the cultivation of grain in the papers respecting Dinajpur, as explained in the accounts of Puraniya and Bhagalpur, are applicable to this district, only that the expense of harvest is here moderate. Rents are heavy, usually amounting to one half of the crop, after deducting the expense of harvest and sometimes to nine-sixteenths. Still, however, even to those who abstain altogether from manual labour, the cultivation of grain is a profitable concern, by which the greater part of the people are entirely supported; for the produce of the dairy is a trifle, and poppy and vegetables, the most valuable articles of cultivation, are entirely reared by the lower classes. Sugar-cane is, indeed, reared in a considerable quantity, but it is entirely confined to some parts of these districts, and there is none

near the Ganges, where the country is most fully occupied, and the people the most easy in their circumstances.

Almost everywhere in these districts the Koeri gardeners are as skilful and industrious as those of Mungger; but many Kurmis, also, and a few Kungjras cultivate in the same manner. The poppy is one of the principal articles of cultivation; but grain and vegetables always enter into the rotation, as mentioned in Bhagalpur. Near great towns many confine themselves to this kind of culture alone; but in general each family has only a small extent of garden land, and has besides a farm cultivated with the plough. The rent is high, and in the vicinity of Patna amounts to from 8 to 20 rupees a customary bigah; that is, from about 4 to about 10 rupees for the bigah of the Calcutta measure. Near country towns the rent may be half as much; in villages the rates may be from 1 to 2 rupees for the Calcutta bigah.

Condiments.—Ginger is not reared in a quantity sufficient for the demand, yet some fields are to be found. Turmeric is also imported, although there are a few fields. Capsicum is not cultivated in fields, but in most parts enough is grown in small plots to serve for the demand. The people, however, are here more moderate in its use than they are in Bengal. There are many fields of onions reared chiefly in poppy fields. Methi is cultivated both in gardens and fields. Of carminative seeds, the jira is the most considerable. It is cultivated in separate fields of a clay soil. Dhaniya, or coriander, is cultivated both in fields and gardens. The ajoyan, or *ammi dioscorides*, is reared intermixed with poppy. The saongp, or *anise*, of which there are a few fields. The randhuni of Ronggopur is here called chandani, and there are a few fields of it also. Soya, or fennel, is confined entirely to gardens. Mint, called by the natives pudina (*mentha viridis*), is much used at Patna. It is made into what is called Chatni, which is prepared by beating mint with salt and various hot seasonings, and sometimes with acids, and is eaten with boiled rice or bread to give them a flavour.

In these districts succulent vegetables are preferred to those of a more leafy nature. That most commonly used is the baygan, including both the *Solanum melongena* and *S. insanum* of botanists. Many fields are occupied by this vegetable. The most common kind is called Manik Baygan,

from three to five of which weigh a ser or two pounds. The fruit is round and black. The stems are sometimes prickly, sometimes unarmed.

The Golbhanta-Baygan is a kind of the *Solanum insanum*, with a fruit rather smaller than that of the last-mentioned plant, and it is shaped like a pear. The stem has sometimes prickles, but is at other times unarmed.

The Baramasiya-Baygan is distinguished by a cylindrical black fruit; but some kinds belong to the *Solanum melongena*, others to the *Solanum insanum*. In fact, the native nomenclature on this subject is perhaps preferable to that of botanists; and, if the Baygans are to be distinguished into different species, the difference in the shape and colour of the fruit will be found the most essential qualities by which they can be distinguished.

The Velayeti-Baygan has an oblong fruit almost cylindrical, but somewhat thicker towards the point, like a club, and it is quite white. The stem, so far as I saw, is always prickly. The Baygan is used chiefly as curry, but is sometimes pickled (*achar*) in oil, salt, turmeric, and mustard-seed.

The potatoe introduced from Europe (*Solanum tuberosum*) is the most common vegetable of this kind. Near Patna and Danapur potatoes are cultivated to a great extent. The large ones are exported to various parts for the use of Europeans, and the smaller ones are consumed by the natives. I did not observe them any where in the interior, except at Gaya, where there are large plantations; but the quantity now used by the natives is pretty considerable.* They are never used as a succedaneum for grain; they are merely dressed as curry, to give a seasoning to rice or cakes, and they are considered as unwholesome. They require to be watered, and are manured with dung and ashes. The same field usually gives potatoes every year, and besides, in the intervals between the crops of this root, it gives one of vegetables, and another of maize. Such land is of a good soil, and lets at 8 or 9 r. a Calcutta bigah, or at about £3. an acre.

The kind of bean called Sema is the next most consider-

* Since this was written, the potatoe is coming into very general use in most parts of India, and it bids fair to effect an important change in the cultivation of the country, and in the habits of the people.—[Ed.]

able vegetable, and seems to occupy much more ground than the potatoe; but the produce of a bigah is comparatively trifling. The green pods are made into curry, and are pickled in the same manner as the Baygan. The ripe seed split is also used in curries. The cucurbitaceous fruit called Taroi, which is the *Petola* of Rumph, is used in curries; as is also Taroi (*Arum peltatum* of the Encyclopédie), and the Kareli, which is the *Momordica muricata* of Willdenow.

The Surajkonghara of Patna is the pumpkin, which, in the account of Puraniya, I have called Velati kumra and Kadima. It is used in curries, and is preserved as a sweetmeat in honey or syrup, having been first fried in butter. It is also made into a dry confection by frying it in butter, then dipping it in syrup, and drying it. It is made into balls used in curries, by beating it, with split pulse, into a paste, adding carminative seeds, ginger, asafœtida, and salt, or sometimes capsicum. This paste is made into balls, which are dried in the sun, and will keep a whole year. When used, these balls are fried in oil or butter, and put into the curry.

The Kaduya, or gourd, is the *Cucurbita leucanthema* of the Encyclopédie. Religious mendicants who are poor use its ripe fruit for bottles. There is a kind, which has a very small fruit, so bitter that it cannot be eaten; but it is cultivated by fishermen, who float their nets with its fruit. The radish (*Raphanus sativus*), here called Murai, is used fresh in curries, is eaten raw, and is pickled in oil, salt, turmeric, and mustard-seed. The Ramtaroi, or *Hibiscus esculentus*, in these districts is much more used than towards the east, and I observed several fields and plantations of this vegetable. It is only used fresh by the natives as an ingredient in curries; but Europeans use it in soups, while they reject most of the vegetables of which the natives are fond. The Calladium, which Rumph calls *Tacca*, but which is by no means the *Tacca sativa* of botanists, althcugh they quote Rumph, is here called Ol, and is a good deal cultivated. The root is used in curries; and, after having been boiled and dried in the sun, is pickled in oil with salt, mustard-seed, turmeric, and ginger. Some, which is brought to Patna from Tirahut, retains always a considerable acrimony; but that which grows in the southern parts of the district, in a clay soil, is quite mild. The cucurbitaceous fruit called here Jhingni or

Kharro, with the Satpatiya, are used in curries. The carrot (*Gajar*) is here given to cattle only as a medicine. The people eat it both raw and boiled, and preserve it in honey or sugar in the moist manner. The Suthna and Suthni are larger and smaller varieties of the *Dioscorea* called Suthni in Puraniya. In different places of these districts there are a good many fields of this vegetable. It is used as a succedaneum for grain, boiled as we do potatoes, or is dressed in curries, or is made into meal (*Mayda*) by cutting it into slices, drying it in the sun, and grinding it in a hand-mill. The meal is made into toasted cakes (*Roti*), or into cakes fried in ghiu (*Puri*), and into a sweetmeat called Mohanbhog, composed of flour, ghiu, sugar, and milk, boiled to a paste, and formed into lumps. The Shukurkund, sweet potatoe, or *Convolvulus Batatas*, is chiefly eaten raw, or boiled by itself. A flour is prepared from it by druggists, and is used in medicine.

The Bhuyakonghara (Kumra of Ronggopur) is chiefly used in curries, and occasionally used in sweetmeats, both dry and moist. The juice of its fruit is preserved by druggists as a medicine. The *Trichosanthes anguina* in some places is called Kaita, but is most commonly known by the name Chichinda. It is only used for curries. The *Dioscorea*, called Lataru, is not so much sought after by the natives as by Europeans. Bora (*Dolichos sinensis*), the pods of which, when green, are used in curries, as are also the ripe beans. The small kind (Chhota) is the *Dolichos Catsiang*. The artichoke of Europe has been introduced into the gardens of Patna, and is now eaten by several of the natives, who call it Hatichak. The fruits of several trees, such as the *Papaya*, fig, Sahajana, and Kachnar are cultivated, as being succulent vegetables used in curries.

The more leafy vegetables cultivated for the kitchen by the natives of these districts, are not so much in request as in Bhagalpur. The *Amaranthi* are by far the most common greens used in these districts, and the most favourite is the Gendhari. The Thariya, Bhola, Chhuriya, Lalbihari, or Purbi (eastern), or Lal-Thariya,, or Lal (red), when boiled, its juice is red like blood, and Dhongra Sak, are all used. Several sorts of spinach, and a species of *Chenopodium*, is a common green. The common Purslane (*Paortulaca sativa*),

called Golpha in the Hindi dialect, is much cultivated in these districts, and is used in the parching heats of spring, which it resists with vigour. The Basellas are a good deal consumed, especially by the poor, almost every one of whom can have a plant or two on the fence that surrounds his hut. In some parts there is reared a good deal of a green called Goyaliya, which Dr. Roxburgh in his MSS. calls *Trigonella tetrapetula* and in its appearance it no doubt more resembles the *Trigonellas* than any other plants, although the resemblance is not very strong, nor does its flower answer to the descriptions usually given of that genus: it is a very poor vegetable. The Soya or fennel-leaves, are sometimes, but very rarely, used alone as a curry: they are very often, however, put in curries as a seasoning, both with other vegetables or fish. A very little of the Corchorus capsulares is cultivated as a green vegetable. Most of the common European vegetables, such as cabbage, cauliflower, lèttuce and turnip, have been introduced by Europeans, thrive unconmonly well, and are now eaten by Moslems, and the castes who use onions and garlic; but all worshippers of Vishnu, and all Brahmans reject them as impure.

Plants used as an acid seasoning.—Acids give a very good flavour to the Indian dishes which Europeans call curries. The natives use many pickles, but as their pickles are not preserved in vinegar, but in oil, they would have little acid from these, unless some of the substances pickled were exceedingly sour, especially the unripe mango and tamarinds. Several other preparations of the mango and of some other fruits are also used as an acid seasoning. The *Hibiscus cannabinus* is a good deal cultivated for ropes, but here its leaves are not used as an acid seasoning. The only article therefore that comes properly under this head, is the kind of sorel called Chuka, of which a very little is used. The Carissa Carandas (Karongda) is more used here than towards the east; much of the fruit is pickled, as usual with oil and various other seasonings. A preparation called Chatni is also made from the fruit, by beating it up with capsicum or black pepper, salt and ginger. A little mustard-seed oil is added to the paste, which is eaten as a seasoning with boiled rice or unleavened cakes. Europeans at present do not pay much attention to gardening, but formerly they would seem

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to have bestowed more pains; and among the natives the use of other vegetables has now spread to a considerable extent. Most of these vegetables live only during the cold season, but the artichoke is plentiful in the heats of spring. Asparagus, which thrives in the rains, has not yet made its way to any extent. The common vegetables thrive so well, that seed is preserved here and sent to other parts of India, where the climate is less favourable. General Watson at Danapur, who has the best garden, that I have seen in these districts, has procured the strawberry from Calcutta; but how it will succeed has not yet been ascertained. White grapes are more common, but scarcely so good as at Mungger, and they continue a shorter time in season, being spoiled by the rain. From this they might be easily sheltered, which would protract the season and enable them to be more fully ripened. The natives eat grapes, but prefer the mango. Pine-apples are almost totally neglected, although the country is no doubt excellently fitted for them. The Khabiya is the most common kind of melon; they are very beautiful and have a fine smell, but the best of them are insipid. In the parching heats of spring the water-melon is very much used, and is exceedingly cooling. Patna is chiefly supplied from Tirahut. Good and bad, they sell to the retailers at from 100 to 200 a rupee, but the best retail as high as two anas each. Cucumbers are very much used, both raw and dressed: that which grows in the hot season is called Khira; that which grows in the periodical rains is called Balam Khira, and is the only good vegetable that Europeans can then procure.

Flower gardens for ornament are not quite so much neglected as in Bhagalpur. Raja Mitrajit, two or three other Zemindars, and many merchants of Patna have such; but they are far from being neat, or from containing a great variety of plants. The only garden worth notice, is one belonging to Baidyanath Babu, a banker of Patna. In the whole of both districts there may be 200. The garland makers, especially near Gaya, raise a considerable quantity of flowers for sale; but they study very little to render their garlands ornamental. They make them of whatever flower is reared most easily at the season, so that they have little or no variety. During the cold season, when I travelled

through the district, no flower almost was in use, except that of the *Tagetes erecta.* Those who extract essences have several flower gardens at Patna and Bar. At the former, between two and three hundred persons have rose-gardens containing from two to ten *kathas* each, that is from $\frac{1}{18}$th to $\frac{1}{3}$rd of an acre. The rose, which is cultivated in these gardens, is said to have originally come from Busorah, and at Patna is called by that name; but in Bengal it is called the Patna rose. It does not seem to differ materially from the common red rose of European gardens (Rosa gallica). It is propagated by cuttings in the rainy season. The cuttings are planted in a bed until they take root, and are then placed three or four together in one hole, the holes being from two to three cubits distant. Every two or three years the bushes are pruned. They flower from the middle of February to the middle of May, and must be watered in the dry season. The flowers, which are rather smaller than those in Europe, sell to the distillers at from 1000 to 4000 for the rupee. They are allowed to expand fully before they are sold. At Bar, those who make essences use almost entirely the *Chambeli,* which botanists call *Jasminum grandiflorum.* I have very strong doubts whether it can be considered as a different species from the common jasmine of Europe. The gardens are managed much like those of the rose-tree, but the plant does not require pruning. It is not supported, as it grows more erect than in Europe. It produces its flower in the rainy season, from the middle of July until the middle of October. A great many officinal plants are reared in the gardens about Patna.

Of plants cultivated for making thread—Cotton is by far the most considerable, amounting to 24,000 bigahs, of which 19,000 give no other crop, except a few seeds scattered among it, or placed in rows round the fields, and 5,000 give also other crops. There are several kinds; Rarhiya, Barsha, and Bhujaru are the most common, Yasoyar is confined to Nawada. These kinds, so far as I can judge, are all of one species, speaking botanically. They all would probably live several years, but this would be considered as bad husbandry, and the field is always ploughed when the first crop has been gathered. The farmer always sells the cotton while retaining the seed, which is removed by the women, who spin.

This is a bad economy, as much of the seed is thus lost, and it is one of the most invigorating foods, than can be given to cattle. The quantity reared is very inadequate to the demand of the country, which is to be regretted, as it is finer than that which comes from the west of India, although very inferior to the cotton of Khyetlal in Dinajpur. The *Corchorus* is very little, if at all cultivated for ropes. The *Crotolaria juncea*, here called Sanai, is used for nets, for the bottoms of the middling kind of bedsteads, and for bags. There are in all however only 400 bigahs. The Kudrum or *Hibiscus cannabinus* is used for the ropes employed in agriculture, and 2000 bigahs produce it; but in these it is always thinly scattered among other crops. The cordage for boats is imported from the north; and the Sabe rope, used in tying together the frames of houses, comes from the south.

Plants cultivated for their saccharine juice. — Besides the palms, and the Mahuya tree, already mentioned, the only article under this head is the sugar-cane, which is cultivated to a large extent. It was estimated, that this amounts to 20,000 bigahs. The kinds are Ketar, Báruka, Mango, Shukurchina, Raungda, and Paungdi. The three latter are thick, and their juice is very sweet, on which account they are eaten, but are not used for expression. The Ketar is the kind with stems no thicker than the finger, and is said to be the most common, but I saw none of it; my people however recollect a great deal. It seems to be the same with the Keruya of Bhagalpur. All the three kinds, in common use for the mill, have yellow stems. The crop lasts 18 months; but ratoons of the Ketar occasionally are preserved, in which case there are two crops of cane in two years and-a-half, but the second crop is very poor. During the six months that remain, either after the one or the two crops of cane, to complete the two or three years, the field gives a crop of grain, after which the cane is again planted. Any high good land, whether stiff or free, is chosen for this valuable plant, and it is carefully watered, and in some places is allowed a little manure; but in others it is alleged, that, if manured, the cane, although it grows more luxuriantly, gives a poor juice, that is not fit for yielding extract. The extract is chiefly of the thinner kind preserved in pots, and the average produce in different places is stated at from 10 to

12 *mans* a Calcutta bigah, which seems to me a fair enough estimate.

Plants used for chewing and smoking—Are of considerable importance, although betle-nut and bhang are not reared, and the quantity of tobacco is altogether inadequate to the demand; but the poppy (or opium) is cultivated to a great extent, and is one of the most productive sources of revenue to government. The poppy is always cultivated near villages in garden land, which is carefully watered, and gives at least one other crop, while some things are almost always sown along with it, especially onions, garlic and coriander, while a hedge of *carthamus* is usually reared round the plot.

In the evening, as each capsule come to the proper degree of maturity, a slight incision is made its whole length, next morning, what opium has exuded is collected. After two or three days another incision is made at some distance; and according to the size of the capsule it admits of being cut from three to five times; but the whole crop season lasts one-and-a-half month, as the capsules advance to maturity at very different periods. The extraction of the opium does little or no injury to the seed, which is chiefly used for making oil, but a little is used in sweetmeats. Among the natives the oil is used both for the lamp and for frying cakes, but it sells lower than that of mustard seed. To European taste it is not quite so execrable. Some of the young capsules, before they are fit for the extraction of opium, are dried, and preserved for making Mudut. That used here is a hot infusion of the dried poppy heads. The preparation is made by squeezing, and rubbing the substance among the water with the hands, in a disgusting manner. The leaves of the young poppy are used as a vegetable. Saline water, as I have said, is the most favourable for watering the poppy, and the sweepings of roads and old houses, where there is a saline efflorescence, mixed with ashes, and any dung that can be procured, are given as a manure.

Tobacco is grown only to the extent of 480 bigahs.

The betle leaf of Magadha is considered superior to all others, and is sent to Calcutta, Lucknow and Benares; but it is alleged, that a very little only is cultivated, and that most of the gardens are planted with the Bengalese kind, which is much more productive, and therefore the value of a

bigah is fully as great, while the sale, owing to its cheapness, is more certain. It was stated, that the whole extent of betle garden is only 265 bigahs, and in fact I saw few or none. The annual produce is estimated worth 300 rupees a bigah, an estimate which I do not think liable to much objection. Since all duties have been removed, the Zemindars lay on additional rents, which now, I am told, amount to 40 rupees a bigah. A great quantity of the leaf used in Patna is imported from Tirahut.

Plants used for dying.—Indigo in these districts is of very little importance, and its cultivation is on the decline. The Zemindars are in general much averse to it; and Raja Mitrajit has expelled it entirely from his great estates. The extent of cultivation, and the quantity of weed will be seen from the tables. A few bigahs in different places are cultivated by the dyers for making indigo after the country fashion. Kusum or Safflower is cultivated to a considerable extent; 1,500 bigahs are sown with this alone, and a great deal is scattered through other crops, especially in rows round poppies, and round vegetables for the kitchen.

Implements for agriculture.—The plough everywhere in these districts has a bit of iron, but does not differ materially in shape from that of Bengal. The cattle, although in a condition equally wretched, are in general stronger made than those towards the east. Each pair of cattle works only the third of a day, and when the stock for each plough is complete, that is consists of six cattle, the ploughman in the season of tilling, that is from the beginning of June until the end of November, does no other work. If there are only two pair, he cuts grass for them; and, if there is one pair, he assists in weeding and hoeing the farm. When small farmers have only two cattle for each plough, two of them usually unite, as four cattle are required for the instrument called Chauki, which is in universal use. In lands that are not watered, wheat, barley, masur and linseed, are sown with the drill called Chongga, which has been mentioned in the account of Bhagalpur.

The sugar mill entirely resembles that of Bhagalpur. The whole expense is about 31 rupees, and the machinery requires to be renewed once in five years. Some old iron remains, but that does not more than pay for annual repairs. The

machinery therefore costs six rupees a year, bills one rupee, pots one rupee, cattle hired by the season six rupees. The total annual expense is therefore about fourteen rupees. This is usually raised by a contribution among those who use the mill, no person having as much field as one mill will clear, although this does not exceed 10 bigahs Calcutta measure, or about three acres. They mutually assist each other at the mill.

Manures.—By far the greater part of the cow dung is burned for fuel. The farmers indeed talk of manuring their land; but from the above-mentioned circumstance the quantity that can be given, must be very trifling, nor did I see any thing like a dunghill. The sweepings of the roads and walls impregnated with nitrous salts, and ashes and other soil from about the house, are however collected, and given to kitchen gardens, to rich crops near the villages; and to the seedlings of rice, that are intended for transplantation. Betle-leaf is manured with fresh earth. Wherever sheep can be procured, they are at night collected together on the fields, which it is intended peculiarly to enrich, and in some places the same is done with black cattle; but in many parts this is neglected. A great deal more pains is bestowed on watering the land than even in Bhagalpur; and, wherever a copious supply is given, other manure seems to be little required. Where the soil is clay, rice will come to maturity without assistance; but the crop is poor and uncertain. Were it is light, irrigation is absolutely necessary. To secure a regular supply during the occasional intervals of fair weather, that happen in the rainy season, and to provide for the want of water, which happens when this ceases early, recourse has been had to both canals from rivers and reservoirs, exactly on the plan of those in Bhagalpur, but more numerous. The land in the reservoir, which in the rainy season is covered by the water, if the reservoir is small, and dries up in time, is usually cultivated for a winter crop of wheat, barley, or pulse; but the larger tanks do not admit of this economy, at least over their whole extent, and in some places it is neglected. The fish, where much water continues, is usually a sufficient remuneration for the loss of the crop, and at any rate defrays the expense of keeping the reservoir in repair. Large reservoirs have a bank of a mile and upwards in length, but do not form above one-tenth of the whole. Such may cost in

forming about 500 rupees; the more usual size cost from 25 to 100 rupees. The people who dig, are usually paid from two and-a-half to four rupees, for 100 Sekunduri cubical *gus* (2 feet 9½ inches long), according to the depth of the ditch, and height of the bank, which constitutes the reservoir. It was in some places reckoned, that every 1000 bigahs of rice land, requires a bank of from 150 to 100 bigahs in length. In other places it was alleged, that 50 bigahs in length would only water 100 bigahs of land.

Many of the canals are several coss in length, and in the dry season convey large quantities of water, often more than remains in the channel of the river. The expense both of making and repairing the canals and reservoirs is entirely defrayed by the Zemindars, who appoint proper persons to divide the water among the tenantry. During the height of the floods these canals and reservoirs afford a supply, by merely allowing the water to flow on the fields through sluices, which usually consist of a hollow tar tree, the end of which is filled with clay, when it is intended, that the water should be confined. In the canals the water is raised to the level of each man's sluice by a small temporary dam of earth. Towards the end of the season the water must be raised from both reservoirs and canals by machinery. The basket suspended by ropes, called here Changr, is sometimes used, when the quantity of water remaining is small; but, when the quantity of water is considerable, the machine like a canoe is used, if the height, to which it is to be raised is small; while the pot raised by a lever is preferred, when the height is considerable. The trouble attending this is not so considerable as might be imagined; because, after the fields next the reservoir have been filled, the same water is allowed to flow on others without any additional labour.

The greater portion of such winter crops, and of vegetables, and sugar-canes, is watered from wells. The usual method of raising the water is by means of a pot suspended from a lever, which has been already described,* and is here called *latha;* it is always here wrought by one man, who stands under the end of the lever on the side of the well next to the fulcrum or post on which the lever moves. This seems

* See Bhagalpur, &c.

a preferable situation to that chosen in Mysore, where the workman stands in directly the opposite position. About one-half of the pots used here are iron, which increases the price much, as an iron pot costs a rupee, while the lever and rope do not cost above four anas, and an earthen pot costs half an ana, but it is often broken. Although one man works each lever, yet it is usual for three levers at least to be wrought in the same well at the same time; and still more, if practicable, is advantageous, because one man can distribute the water raised by four or five lathas, and one man is necessary where only one latha is employed. Two men usually work from sun-rise until nine o'clock, and from three o'clock to sun-set, or rather until dark. Where the depth is moderate, three men with two lathas water from about $\frac{2}{3}$ds of an acre to $\frac{1}{3}$rd daily.

Domestic Animals.—Horses are not here used for the conveyance of goods. Very few of the larger kind are bred here, they are brought from Tirahut or the west. The ponies (called here Chhanathi) are by no means better than the Tatoos of the east, and in spring, except in Patna, are truly wretched, as they receive no food except what they find in the fields, and scarcely any vestige of grass then remains: they are fully as dear as in Bhagalpur. An estimate of the number of other kinds of cattle will be found in the Appendix. Oxen are in general much superior to those in Bengal. Owing to the scantiness of forage, few cows are kept. Bulls sell lower than cows, and these lower than oxen. The breed, however, is not rendered worse by working the cow, a practice that would not here be tolerated; any person attempting to do such a thing would be considered as a monster, and be in the utmost danger of popular violence. Asses are used to carry bricks and mud for building.

Of pasture there is 27 square miles of inundated land, mostly covered with long coarse grass, often preserved for thatch, by which it is very much injured as pasture; 384 square miles of woods or scattered bushes; about 80 miles are of the latter description, and in the rainy season are excellent pasture; but in the dry season they are quite parched, and it is the bushes only that retain verdure. The woods are not such good pasture in the rainy season, but in the dry they are less parched. The people, however, of this district, who

live at any distance from the woods, seldom avail themselves of this resource, but keep their cattle at home, and the mango groves form what they call their *Bathan*. The cattle are sent there more for the sake of getting air in a cool shady place, than for the sake of the pasture; although in the rainy season some bad grass grows under the shade of these trees, and their fallen leaves are eaten in the extremity of hunger. The plantations, therefore, must be considered as one of the principal parts of the pasture, and amount to no less than 640 square miles. There are 205 miles of high land in clear pasture, but some of this is covered with coarse grass preserved for thatch, by which the pasture is injured. This is quite parched in the dry season, but in the periodical rains gives an abundant supply. Of the hills, perhaps 30 square miles may in the rainy season be covered with a short herbage fit for cattle to eat. Broken corners, banks, burial grounds, roads and barren lands, amount to 417 miles, of which probably near 400 may be covered with a soft herbage that in the rainy season is very productive, and its grass is then carefully cut. In many places this and the mango groves are the only source for green forage: in the dry season they give little or none, but the mango groves in many parts are the only places to which the cattle can be sent for air. It would thus appear, that in the rainy season, there is a tolerable supply for the cattle that are kept, and except then little or no work is performed by the plough, and they in general are then in tolerable condition. In the dry season both the plough cattle and the cows are truly wretched, and are chiefly supported on a little *Poyal* and *Bhusa* that each receives morning and evening, and on the stubble of grain, particularly that of rice. Towards the end of the rainy season while much labour is performed, and when the grass begins to fail, they are assisted by the stems of Maize and Janera. The cows that are in full milk are generally allowed some green Janera and Khesari, not indeed in a quantity sufficient to keep them fat, but it enables them to give some milk.* The people also collect for them some vetches called *Akta* (*Vicia sativa*, and an *Ervum* lately mentioned), which grow as weeds among the young wheat.

* The greater number of the cows give a calf once in two years, and have five in the course of their life; some however yield but three calves.

A very few cows are kept in the house, and regulariy fed on Bhusa or cut grass, on which they keep in very good order, and some in addition are allowed oil-cake. Cattle employed to carry loads or in mills are fed in the same manner, and all are allowed cotton-seed or oil-cake, which, when mixed with Bhusa and water, forms Sani. An ox fed in this manner costs four paysas a day in towns, or half as much in the country; the latter rate is little more than one rupee a month, *i. e.* 13 rupees a year. The cattle employed to draw carriages, especially those reserved entirely for travelling, are allowed pulse usually of the kinds called Kulthi and Urid. The sour drink prepared from the remains of vegetable food, washings of grain, and water in which grain has been boiled, that in the south of India is given to cattle, is here entirely neglected, which seems a great want of economy. There is no rent exacted for pasture.

Salt is given to cattle as a medicine. The burnings, so freely applied in the south of India, are not here in use. In cold weather, towards the Ganges, the cattle are kept in the house, but in the hot and rainy seasons they are tied to stakes near the houses. In the southern parts of the country they lie out all the year. In the wastes of Nawada and Sheykhpurah there are a few Bathans, where the cattle sleep in the woods surrounded by a hedge of dry thorns; but the number of such is very trifling, and, as I have said, in most parts the people call the mango grove their Bathan, although the cattle remain their only during day.

Buffaloes are a valuable property. They are good cattle of the kind, and on an average breeding females sell for 26 rupees a pair. In the list of milch buffaloes, the adults have only been included. A third more may be added for the young. The plough buffaloes are mostly males, which by labour are disabled from breeding; and males exempted from labour must be kept for that purpose, but little selection seems to be made. Among the plough buffaloes are some females that have turned out barren. The number wrought seems to increase in proportion to the dryness of the climate. On account of those reserved for ploughing fewer of the calves are destroyed, when young, than in Bhagalpur; but few or none are reared for sacrifice. Some

buffaloes are employed to carry home sugar-cane and maize from the field.

In these districts almost the whole buffaloes live entirely in the villages, and are fed in the same manner as milch cows: that is, they get any pasture which is procurable, and in the dry season are allowed a little Sani and Bhusa at night, and sometimes the Mahuya flowers, from which spirit has been extracted. Those in full milk, towards the end of the rainy season, and in Spring, receive some green Janera and Khesari; but the situation of the greater part is in general truly wretched. In the woods of Nawada are two or three Bathans, where the condition of the buffaloes is throughout the year tolerable. The buffaloes of Duriyapur during a part of the year are kept on the north side of the Ganges.

The price paid for tending buffaloes is usually double of that given for cows, and often quadruple. The following was given in Duriyapur as an estimate of the annual expense attending a herd of female buffaloes, consisting of 100 head, of which 25 are young.

To two keepers at 25 rupees each	R. 50	0	0
To eight month's pasture on the north side of the Ganges, at 4½ anas per head on the adults	21	1	6
Green forage purchased while at home	120	0	0
Khari salt, ¾ ser each, three times a year = 225 sers .	2	4	0
	R. 193	5	6
25 are constantly in milk, giving daily in all 100 sers (56 s. w.) for every 12 of which the owner receives 1 ser of ghiu, he therefore gets in all 3041⅔ sers (lb. 4372) worth 13 rupees for 48 sers	R. 823	14	4¼
Balance	R. 630	8	10¼

Goats are very numerous. The small goat of Bengal is by much the most common, and is exceedingly productive. Here, as in other districts, the chief profit from this stock arises from the males sold for sacrifice or for eating.

All the sheep are of the long tailed kind. It is worthy of remark, that the sheep of this breed seem fonder of the leaves of trees than the goats are, just the reverse of what happens in Europe. Swine increase in numbers, as we advance farther to the west.

Poultry is scarce. Fowls are chiefly reared by the Muhammedan weavers, and aboriginal tribes of Hindus; and a few tolerably fat may be purchased at Patna. Some of the Dosads at Patna rear turkies for the use of Europeans. At the same place a few Moslems sell geese, but in other places they are kept merely as pets. There are no ducks. A few may be procured at Patna from Tirahut. Pigeons are not so plenty as in Bengal, but they may be had in every part of these districts.

Of Farms.—Except in the cities of Patna and Gaya, or in large market places, the Ashraf or high ranks pay no rent for the ground occupied by their houses, nor can a landlord refuse to allot land for the purpose to any Ashraf who requires it. Europeans have not been dignified with the title of Ashraf, and find great difficulty in procuring lands for building, and must always pay an extraordinary rent; a modesty very much to the credit of these successful invaders. The exemption in favour of the Ashraf is in fact of no great value, as almost every one of them, who resides in the country, and who has not free land, rents a farm, and no person who rents a farm (*Asami*), pays for his house. The houses, however, having little or no garden annexed, occupy very little space, as merely the yard (*Anggana*) is exempted. Artificers, traders, and labourers, pay a heavy ground rent, either in money or work.

The Ashraf farmers have a more solid advantage in being favoured in a rate of rent lower than what is paid by other farmers; but there is no sort of regular allowance for this deduction, the amount depends entirely on the favour of the landlord, or the frauds of his agents, and the estates here are in general so small that little room is left for the latter. Many of these tenants do every kind of work with their own hands, except holding the plough; and they are careful, active men, having at present no other resources to enable them to procure a living. Previously to the Company's government, many of them had been involved in frequent predatory warfares, and the Zemindar encouraged them, as on their number and fidelity depended entirely his security; and it seems to have been owing to this in a great measure that they have become so numerous. In some parts, that I have before surveyed, the high castes have a great advantage in keeping

large herds of milch cattle, which are a severe nuisance on their poor neighbours; but here this resource fails; for the lower castes in Behar would not fail to abuse the higher, were their cattle to trespass; and this is so disagreeable to the pride of the higher castes, that many of them here avoid keeping cows.

In these districts the second class of farmers consists of traders (*Bukalis*), but is not numerous. They never labour with their own hands. Many petty traders (*Grikastha-Beparis*) do not belong to this class, but are considered as (*Chasas*) ploughmen, and have large farms.

The artificers (*Pauniyas*) form the third class of farmers, and many of them work part of the year at their farms, part of the year at their art; but more commonly one brother farms, and another follows his profession. In this class I have included only those Goyalas, that prepare and sell milk, and these form a very small part of this numerous tribe. Of the artificers, who employ part of their time in cultivation, many are day labourers.

The fourth class of farmers are those of the Chasa or ploughing tribes, many of whom, however, as in Bhagalpur, are servants, day labourers, and slaves. Some traders among them (Grihastha Beparis) possess a considerable stock in carriage cattle, with a little money to enable them to trade from one market place to another. It is also supposed, that a good many of the Koeris especially, who cultivate land watered from wells, have money, partly lent out at interest, partly secreted; but there are very few supposed to have above 1000 rupees, and 5000 is supposed to be the utmost extent which any one possesses. In the manner of their living these men are not to be distinguished from the poorer sort of tenants. In these districts are few or none of the under tenants, that in Bhagalpur form the fourth class.

Persons of rank, farmers, barbers, washermen, shoemakers, carpenters, blacksmiths, and potters, pay no ground rent for their houses; but the tradesmen do whatever little jobs their landlord requires. All other artificers and traders in small villages pay two paysas a month, and in towns they pay double that amount, which is about seven-eighths of a rupee a year for about one fifth bigah of the customary measure.

In the Appendix will be found an estimate of the proportion

of live stock, which belongs respectively to these four classes of farmers; and an estimate of the respective proportions of rent which each class pays. On the second and third classes this is apparently higher than is really the case, because all the traders and some of the artificers, who have no farms, pay rent for their houses, which none of the other classes do. Also an estimate of the respective proportions of ploughs which are held by the owners, or by servants of various kinds. As almost every tenant pays a large proportion of his rent by a division of the crops, there are in these districts none of the persons, who in Bengal are called *Adhiyars*. In the Appendix I have annexed an estimate of the proportion of rent paid in money, and that which arises from a division of the crops, circumstances that deserve peculiar attention. These tables will explain many circumstances respecting the stock of farms. I shall now give some farther elucidation of that subject.

Plough cattle, as in the districts hitherto surveyed, form the only stock worth notice, and the average amount for each division may be found by dividing the whole value of plough cattle, which appears in the Appendix, by the number of bigahs actually occupied. From the same tables, by a similar division, the average extent cultivated by any quantity of this stock is shown; and an estimate of the number of cattle allowed for each plough, constructed on the same principles with those of the Puraniya district and Bhagalpur, where farther explanations are given.

In almost every part of these districts the tenants for by far the greatest part of their farms pay as rent one half of the produce, and in some places nine-sixteenths even are demanded. Previous to the division they are allowed a deduction of what is called the expense of harvest, by which they have always some profit. Some other deductions are made from the gross produce, but as part of these are for the benefit of the tenant, and part goes in fact to the master, the rent ought to be one half of the gross produce, deducting the expense of harvest, and many of the estates are so small, and the tenants are so carefully watched by men, who, farming part of their own lands, are perfectly aware of every circumstance, that there can be little room for fraud. The cost of cultivation must fall considerably short of one half of the pro-

duce, as very many who do no labour with their own hands, live by farming, and have no other resource. An Ashraf who has three ploughs with four oxen for each, can pay this rent and live decently, which will require an income of at least 90 rupees a year. With this stock he may cultivate between 30 and 40 acres. This system of levying the rent by a division of crops, has produced a slovenly and careless cultivation, and it must be observed that the fields intended for grain are allowed much less ploughing than is given in Bengal, where a money rent is paid. The tenant is not pushed for his rent, and his great object in place of cultivating well is to diminish the expense of cultivation. From this a very great loss arises to the landlord, and still more to the public. Say, that the expense at present of cultivating an acre is 4 rupees, and that the neat produce is 12 rupees. The landlord has 6 and the tenant has 2 as profit; but if, by doubling the expense, the produce could be increased one half, the landlord would have half more rent, or 9 rupees, but there would remain to the tenant only 1 rupee. If, indeed, the landlord would content himself with a money rent of 7 rupees, which is higher than he now receives, the tenant would have a profit of 3 rupees, and this advantage would induce him to incur the increased expense. Almost every tenant, however, in these districts has some land, for which he pays a money rent, and on this is bestowed all his care, by rearing on it rich crops, by manuring and by frequent repeated ploughing and hoeing. The rent is much higher than the share which the landlord receives on the division of crops, and the farmers who have the largest proportion of this kind of land are in the easiest circumstances. The high castes, however, are not fond of this tenure, because it requires too much exertion and industry. The only circumstance in which the system of letting land by a division of the crops should be tolerated, is where the crops are very uncertain. When they fail altogether, it is impossible, without a stock not likely to be ever possessed by farmers in India, that the rent can be paid; and, when they succeed, it is but fair that the landlord should receive an extraordinary profit.

Although fewer of the tenants than in Bengal are very rich; yet, as I have said, many of them have accumulated little sums of money; and the system of advances having been

pushed to a comparatively small extent, the tenantry is not so deeply involved in debt. And it must be observed, that those here, also, who borrow money at 2 per cent. a month, are universally allowed to be less necessitous than those who take money in advance for their crops; although these nominally deliver their produce at only from 2 to 2½ sers on the rupee lower than the harvest price, and pay no interest. Those who borrow the money keep their produce until they can receive a fair price.

The arrears due by the tenantry to their landlords are quite trifling except on one estate, where the owner has been in the habit of giving much money in advance, supposing that it would assist his people to increase the cultivation. Quite the reverse, however, has been the result.

There has been no attempt to regulate the size of farms. Very few join their stock to form a quantity sufficient for one plough; although many poor tenants join their cattle to work the instrument called Chauki; but in Duriyapur and Bar there are several persons who rent land that cannot procure stock, and are called Dhuriyas. For the consideration of being furnished with a plough and cattle, they hold the plough seven days on the owner's field, and two days on their own, as has been mentioned to be the custom in some parts of Puraniya.

The custom of advances (*tukabi*) from the landlord to the tenant to enable him to cultivate is not very common, although it exists to some extent, and its effects in one case at least have been just now mentioned. New tenants usually receive a trifle to enable them to build a house; but it is repaid in the course of the year. Those who cultivate sugar-cane usually receive 2 rupees a bigah from their landlord, which is repaid at crop season. The rent for this kind of land is everywhere very high, and the cultivation is expensive.

The rents are much more equally assessed than in any of the districts hitherto surveyed. Ashraf, however, as I have said, are generally favoured in the division of the crop, and even in the rate of money rent.

In these districts I heard very few complaints of illegal exactions, which seems to be chiefly owing to a great proportion of the tenantry having been formerly addicted to arms, and to their having in consequence much more courage to resist

oppression than the poor Bengalese. The only complaints, almost, of which I heard, were on the estate of some large proprietors, who find it impossible to collect their rents, mostly paid by a division of the crop, without farming them; and where rents are farmed, especially to rich, litigious, or violent men, it is impossible altogether to avoid such oppressions, the farmers having no permanent interest in the estate, and being fearless of the law, the delays in which render all precautions in favour of the poorer tenantry perfectly nugatory. This is an additional reason against the practice of letting for such rents; as on any considerable property the frauds, without farming the rents would be altogether insufferable. Some remedy might be afforded to these evils by prohibiting the rents of more than one Mauza from being farmed by one man.

The tenants of these districts are not much afraid of their landlords, but I believe are a good deal attached to their interests, and would willingly join them in any military enterprise where there were hopes of plunder.

The rents here, as well as in Bhagalpur, which are paid in money, are called Nukudi, and those arising from a division of the crop are called Bhauli. Some persons have the whole of their rent Nukudi, others have the whole Bhauli, but in general each person has a share of both.

The Nukudi here is no doubt collected in petty instalments; but a written receipt is almost always delivered at each payment, which is a great preservative from oppression. There are two kinds of Nukudi; one is called Hustbudi, where the land is annually surveyed, and pays so much for each bigah that is cultivated with such or such crops, according to their supposed value. When the annual accompt is made out, it is in all cases usual to deduct one-tenth of the amount, and when the tenant complains that his crop is bad, the surveyor is employed to examine the field, and to state how much the crop is inferior to what it ought to be, and a proportional allowance is deducted from his rent. This, with all the appearance of fairness, is a very destructive tenure, as it renders the tenant careless. It is, however, by far the most common. The other means of fixing the rate of rent, called Baharsi, or Thika, is to value the ground according to its quality; and when the tenant enters his farm this is valued according to

the rates usual in the vicinity, and he cultivates it in whatever manner he pleases, and pays the rent according to the valuation. This, as I have had repeated occasion to mention, is the tenure by far the most favourable for the improvement of agriculture, and to which every encouragement should be shown.

I have already had occasion to dwell fully on the nature of the rents arising from a division of the crop. The division is so troublesome, that, instead of their respective shares, both master and tenant, when the crop is ripe, usually agree, the one to take and the other to give a certain quantity of grain, or its value in money. For this purpose a surveyor and arbitrator are appointed, who state what ought to be paid. If the tenant is satisfied, he pays this; if he is not satisfied, he stands a division. The valuation in this manner is considered as a favour granted to good tenants, and which cannot be shown to the indolent and necessitous. The landlord, were he to trust them, would receive nothing. His officers must therefore carefully attend at the thrashing floor, and secure his share, before it comes into the clutches of those to whom the tenant is indebted. On small estates the Bataiya is least liable to objections; on large ones it gives rise to so many frauds against the master, that it is scarcely admissible. It seems to be a remain of this custom, that has led to the strange and oppressive custom of fixing the money rents after the crops have approached to maturity, that has been mentioned as existing in some parts of Puraniya. Originally, perhaps, the tenant was bound only to pay a share, and arbitrators were appointed by the Zemindar to put a value on that share, which value the tenant paid, if satisfied. This is quite fair; but, as a means of ascertaining a money rent to be paid during a long lease, it is a most abominable oppression, of which some traces still remain in these districts, where it once probably was common.

Although the rents here are much higher than towards the east, the people in general are by no means poorer, and in particular they are in much better circumstances than the tenantry in those parts of Bhagalpur and Puraniya that pay next to nothing.

It would seem that formerly the custom of granting leases was more common than at present. In many places the

landlords are not willing to give leases, nor would the tenants accept of them. In others a lease has been granted; but when it has expired, it has not been renewed, and the tenants continue to occupy at the same rate, the owner or his clerk writing "It is right" on the back of the lease. In general no attempt has been made to raise the rents; nor could they admit of such a measure, as by far the greater part of the land pays one-half of the produce. Some attempts have been made to raise the money rent, and it is said that two opposite decisions have been given, the judge at Gaya having declared that the landlords might let such lands as were out of lease in whatever manner they pleased; while the judge at Ara declared that only the old rates could be demanded, and the landlords have found it imprudent to insist on the demand. The chief change that seems to be taking place is, that a good deal of land, which formerly paid by a division of crops, has been lately given for a money rent. This is especially going on under the prudent management of Raja Mitrajit, and is one of the greatest improvements that can be effected. Most of the leases have been granted to the chief tenant of the village, with an &c. for the others, and merely state the rates of rent, so that no estimate of the rental could be formed by obtaining all the leases on the estate. In other places each tenant procured a lease (*Patta*), and gave an agreement (*Kubuliut*) to pay at the rates specified, for in these leases even the actual sum to be paid is seldom mentioned. In these places new tenants have not of late given the agreement called Kubuliut; but, in its stead, have given one called *Ekrar*. Many disputes might be prevented by compelling all tenants to take leases, in which the total demand of the landlord should be specified.

I now proceed to give an account of those who cultivate land in which they have no property. No persons are here hired to cultivate for a share of the crop, as that is the manner in which the tenantry are rewarded for their stock and labour. When treating of the condition of the people, I have already mentioned all that occurs to me concerning the slaves employed in agriculture. It now only, therefore, remains to treat of ploughmen hired by the season, and of day-labourers employed in agriculture. I may, however, premise that the same custom of neighbours uniting to labour alternately on

each others fields is here as common as in Bhagalpur, and I am told is common in every part of Bengal, although it there escaped my notice.

The plough-servants (*Kamiyas*) in these districts are exactly on the same footing with those in the part of Bhagalpur that belonged to Behar, and this has already been fully described. The chief difference that I observed was, that in many places the son was considered bound to repay the money advanced to his father, even should the effects left on the parent's decease be far less in value than his debts. This seems to me an extreme hardship, reducing the whole of this class to a condition little better than that of slavery, and ought to be declared totally illegal. I was assured in some places of the district, that within the memory of man the price necessary to be advanced to servants has doubled. Formerly no one gave more than 20 rupees; now they are content to give 40. This seems in a great measure owing to the increased quantity of money. It certainly cannot here be attributed to the exertions of indigo planters, who in some districts claim the merit of having raised the workmen's wages. In some places the ploughman (*Kamiya*) receives a small spot of land, from 5 to 20 Kathas ($\frac{5}{20}$ $\frac{15}{20}$ of an acre) of the country measure. This he cultivates with his master's plough; but finds the seed, and gives his master one-half of the produce, that is, pays the rent. The usual daily allowance, when ploughing, is 3 sers of grain, or in some places from 1½ to 2 Paysas, with ½ ser of the unboiled porridge called Chhattu. It is seldom that in this season they work more than nine hours for their master, and when required to work the whole day, they receive an additional allowance. They seldom, however, at that season earn more; but they do little jobs about their own house, or spot of ground, when they have any. The following was given as an estimate of one's gains in the country part of Pergunah Azimabad, near Patna:—

	Paysas.	Sers Chhattu.	Sers Grain.
182 days ploughing, at 2 Paysas and ½ ser Chhattu	364	91	0
60 days watering, at 3 Paysas and ½ ser Chhattu	180	30	0
45 days reaping	0	0	310
45 days thrashing and cleaning	0	22	40
15 days repairing their master's house	45	0	0
15 days idle.			
	589	143	350

589 Paysas	R. 10	8	3
143 sers (76 s. w.) of unboiled porridge (meal and water) 285 lb. of meal .	2	2	6
350 sers of coarse grain=682 lbs. . .	4	2	3
	R. 16	13	0

In order to give an idea of what the labourer may procure for this money, I may observe that each rupee brings about 156 lbs. of maize, or other coarse, but wholesome grain; but no allowance is here made for sickness. A woman, reaping, weeding, and transplanting, makes almost as high wages as the man ploughing. At other times she may generally procure as much by beating rice; but she is liable to more interruptions. She, however, may clear 8 rs.; the man, allowing for sickness, may make 14 rs.; an old person, boy, or girl, able to tend cattle, will make 4½ rs.; total for a small family, 26½ rs. If the family exceeds five, there will usually be more workers. I shall give another estimate from Nawada, one of the poorer and least cultivated parts of the district, where the assessment is low, and where a large proportion of the expense of labour is thrown on the harvest, most of the rent being obtained by a division of the crop.

	Sers Grain.	Sers Chhattu.	Money.	
To six months ploughing, ...	546	91	0	0
To watering one month, ...	90	15	0	0
To repairing their master's house, one month, .	90	15	0	0
To reaping two months, 1-21 bundle, .	600	0	0	0
Do. Ati, ...	360	0	0	0
Do. Lara, ...	1050	0	0	0
To thrashing one month, no allowance, .	0	0	0	0
One month idle, or cultivating for themselves a plot of about one bigah Calcutta measure, they take one-half of the produce	0	0	1	6¼
	2736	121	1	6¼

The ser weighs only 48 s. w.; so that the grain is 3,371 lb. and the parched meal in the Chhattu or porridge is 149 lb. I have valued the produce of the land in money, at for what one-half of it would sell in harvest. The grain converted into money is worth r. 18 15 4. The parched meal is worth about r. 1 11 8. The total annual gain is therefore 22rs. 1½ anas; but in that part only small advances, such as two rupees are given without interest, and the woman, while collecting the Lara, can do no other work.

I have already mentioned the reward given to those who tend cattle, which is very high. Day labourers are numerous; great numbers are employed with the hoe, in transplanting rice, and in watering winter crops, and these receive one-third more grain than common labourers. In Patna, in place of grain they are paid in money, and in place of three or four sers of grain, get three or four paysas, which will purchase four and-a-half to six sers of the coarse grains, that thy use. Notwithstanding the extreme jealousy of the men, the women other day labourers make almost as much as the men, as they are employed to weed and transplant rice, receiving the same allowances as men, and they assist in the harvest.

People of high caste, although they will work on their own farms, at every labour except holding the plough, will not hire themselves as day labourers; but poor people of the cultivating tribes (*Chasas*) or artificers, do not consider this employment as at all disgraceful, and by its means many small farmers gain a part of their subsistence. I have not heard of any day labourers being here paid in advance.

Estates.—In these districts the extent of lands exempted from revenue is enormous, and many of the lots are pretty considerable; but by the rule of succession* that has been established, they are fast frittering into petty portions, so that very few of the proprietors live in the splendour of gentlemen; and many of them are more distinguished for silly bigotry and superstition than for learning. A great deal has been alienated from the purposes for which it was granted; but I do not know, whether government, as the law now stands, could altogether resume lands granted for the support of colleges, mosques, temples and tombs that have been allowed to go to ruin, or that were intended for the support of noble families or persons dedicated to religion and learning, when they have been alienated to plebeians or to laymen, or to the vulgar. I presume, however, that the present occupants might be compelled to give a reasonable share of the profits for these purposes. There is also great reason to suspect that many of the occupants have no legal claims of propinquity to those who originally received the grants. On these accounts the whole free lands of Behar, as well as of other districts, would perhaps require investigation.

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* I suppose by this is meant the law of equal partibility of property which prevails in India.—*Ed.*

If government is unwilling to incur the suspicion of rapacity, the lands or revenue to be thus recovered might be granted to public institutions for the education of the natives, which are very much wanted and would be very popular, and an agent for the institutions might conduct the recovery.*

According to the public records, the whole land that has been measured being 5,520,541 bigahs, and the free land, so far also as it has been measured, being 1,510,437 bigahs, it forms $37\frac{1}{2}$ per cent. of the whole: nor do I believe that this proportion is materially erroneous, as considerable extents of land have not been measured, and probably nearly in the same proportions in both kinds.

I have not exactly learned the nature of the tenures in the parts of these districts, that lately were taken from Shahabad; but I perceive, that almost the whole there belongs to Muhammedans, and this is also the case in the other parts. Indeed there is strong reason to think that almost every grant which the Hindus occupy, has been procured by forgery or other fraud, during the confusion which prevailed on the first occupancy of power by the Company's servants, and that during the Mogul government no grants of land were tolerated for the support of idolatry, or of a pagan priesthood. In the estates which these districts contained, before the annexation of part of Shahabad, the following are the purposes for which the free lands have been granted:

	Lodikhans bigahs.	
1st. Eltugma vulgo Eltumga, lands granted in perpetuity as a reward for splendid military actions, or for the support of a noble family. Registered at . .	2,82,037	$7\frac{1}{4}$
2nd. Jaygir or lands granted to a military officer for the support of his establishment, and only for life; but many claim it in perpetuity, and the claim in some cases is said to have been admitted. It is registered at .	2,24,252	$19\frac{3}{4}$
3rd. Jaygir Pasban, land granted for the support of watchmen. This is usually paid by the Zemindars, and other landholders; but in some instances the allowance has been made by government. This land of course belongs entirely to the public, and is applicable to the support of the police, and government has a fair claim on the Zemindars, where such lands have not been separated from their estates, to compel them to pay for the support of this establishment. Registered at . .	428	10

* The Government of India having the Sovereignty of the land exact a rent in proportion to the produce.—*Ed.*

	Lodikhans	bigahs.
4th. Sershekun is said to be land given to Zemindars, who have been killed in battle fighting for the king. Registered at	44,789	0¾
5th. Kharcj-Juma, is land allowed free to Zemindars as a reward for services. Registered at . . .	3,54,339	7
6th. Mafi, is land granted to Zemindars, who on account of services were excused from paying their whole assessment. This excuse was usually granted by the king, the Kharej-Juma was usually a grant from a provincial governor. Registered at	26,618	7
7th. Nankar, land given to the Zemindars for their maintenance. This ought not to be reckoned free, for as belonging to each estate it forms a part of the security to the public for the payment of the revenue. Registered at	62,138	0
8th. Malekan ought to be a share of the revenue granted to ancient owners of land, when the government chose to take the management into their own hands; but lands free of rent would seem in some cases to have been granted in lieu of their commission. Registered at .	2,473	19
9th. Inam or Inamat, land bestowed as a gift. Registered at	3,506	0
10th. Inam Kanungoeyan, land bestowed as a gift on the persons, who kept the records of revenue . .	400	0
11th. Mududmash, land given to any favourite for his table expenses. Registered at . . .	1,01,267	16 7
12th. Ayimah Ozzam, land given daily for religious purposes, (kings being held bound to give more or less daily). Registered at	3,06,373	9¼
13th. Khayrat, is land granted for the same purpose on extraordinary occasions. Registered at . .	1,93,040	9
14th. Neyaz-Durgah, land granted to those who perform prayers at tombs. Registered at	853	13
15th. Talok-Durgah, land the property of tombs. Registered at	1,500	0
16th. Brahmottar, is land granted to Brahmans for their support. None such as I am told was ever given by the kings. Registered at	7,948	17
17th. Brahmottar Vishnupriti, land granted to Brahmans for the sake of Vishnu. Registered at . .	2,181	0
18th. Vishnupriti, land granted for the sake of Vishnu. It differs in name alone from the last. Registered at .	36,956	17
19th. Sivottar, land granted for the sake of Siva. Registered at	214	16
20th. Khaleslah Shurifah, is a grant, of which I have procured no explanation. Registered at . .	8,817	18
21st. Musruf, is another similar grant. Registered at .	1,250	0

Besides the free lands, the invalid establishment has obtained 24,194 bigahs of their measure, equal to about 47,500 bigahs of Lodikhan, or 54,400 of the Calcutta standard: the whole belongs to the Zemindars, and has hitherto been a burthen, which has occasioned much ill-will between the parties; it is alleged that the Zemindars have forcibly seized on a part.

The minute subdivision of property has reduced by far the greater part of the Zemindars to the condition of mere peasants, and many of them could not live decently without cultivating their lands on their own account. This division of property has however its advantages as well as losses. These small Zemindars are certainly less oppressive to their tenants and more obedient to government, than the greater; but they banish every thing like splendor or learning from the country, and confine its demands entirely to the most simple and rude manufactures, so that they almost entirely exclude commerce; and the litigations to which the subdivision gives rise, are endless. These losses seem to me to be more than a counterbalance for the advantages, especially as no pains can remedy the evil which the minute subdivision of property occasions, while a firm government and careful administration of justice may in a great measure prevent the evils of large estates. I would earnestly therefore recommend, that landed properties should be made to descend undivided, as they do in most parts of Europe. The natives, I believe, have no prejudices on the subject, and the doctors of their laws are so entirely occupied with the ceremonials of religion, and consider these as of such infinitely greater importance, that they are perfectly prepared and willing to decide in worldly matters according to whatever any government may choose to desire.

The petty landlords of these districts are not called Zemindars, but Maleks, and by far the greater part of them are military Brahmans, and appear to have been the proprietors of the land before the Muhammedan conquest, that is to say, held them by military tenure from the Hindu kings; but whether they held them in perpetuity, is very doubtful; and in all probability the Rayats here, as elsewhere, were the real owners of the land, the military tenant exacting only the land-tax imposed by government. In the Mogul government the Maleks were certainly not officers of government,

as the Zemindars undoubtedly were; nor had they in general any management of their lands. An officer of government granted leases, collected the rent, and gave the Malek one-tenth of the neat proceeds. The Malek appointed an accomptant (*Screshtahdar*) to see that he received his due, and usually received a trifling annual present from the tenants of each village, as an acknowledgment of superiority in the feudal sense. Some chief men, called Kanoongoes and Chaudhuris, had allowances called Nankar and Dustur; the former was a portion of land free of rent, the latter consisted of certain presents given by those who held lands that were exempted from revenue, in lieu of the tenth of the revenue. In some places, however, it is alleged, that the Maleks managed their own estates, and accounted to the Amel or collector for the whole proceeds, deducting one-tenth of the neat profit for their support. On the settlement made by Lord Cornwallis, most of the Maleks were placed exactly on the footing of Zemindars, although some estates have been granted to other persons, who pay to the Maleks the same allowance that they received in the Mogul government. These estates, in fact, are some which were confirmed to Mogul Zemindars, whose office, owing to their boldness and the weakness of government, had become hereditary; and owing to the former circumstance, these persons drove altogether many of the Maleks, while they retained others, who assisted in their battles as military vassals. Where the estates, either free or assessed, are large, the owners keep establishments, much such as in the districts hitherto surveyed, and according to their rank employ a Dewan or Tahasildar as their steward, with clerks here called Motsuddis or Peshkars, cash keepers (*Fotdars*), record keepers (*Dufturis*), guards (*Peyadahs*), under an officer (*Jumadar*), &c. These reside at an office (*Kachahri*), where the rents are collected; but in the whole of these districts the number of such establishments is very small; there may be perhaps 15 or 20. The property indeed has been so much subdivided, that it would be highly oppressive to compel the owners to pay their revenue into the collector's office, as is usually done in Bengal; for, besides the risk, the expense of sending such trifles to a distance would exceed the amount. On this account the collector in several parts of the country has appointed

Tahasildars, who receive the land-tax from the petty Zemindars. This I know is attended with abuses, but it must in time extend all over the country, if the present manner of succession to landed property be allowed to subsist.

Small Zemindars keep a clerk, with whose assistance they collect the rents, and they have one or more watchmen (*Chaukidars*), who give an alarm in case of an attempt at robbery; for most of the landlords have numerous families, and are both well armed and perfectly able and willing to defend themselves.

The usual village establishment is as follows:—A common agent (*Gomashtah*) is generally employed to manage from one to five mauzas, whether these belong to one person or to many. He keeps the accompts, and distributes every man his share of the profit, for which arduous task he receives only from 3 to 5 rs. a month; but he is allowed a clerk (*Patwari*) at from $1\frac{1}{2}$ to 3 rs., and in some places has a commission of from 2 to 4-56ths on the receipts, and in others a fee from the tenant on each annual receipt. This is called Hojjutanah, and usually amounts to 2 paysas, or $\frac{1}{32}$ of a rupee from each man. Both Gomashtahs and Patwaris have almost everywhere illicit gains, which chiefly arise from the division of the crop, they conniving with the tenant against the landlord. I am told that no Patwari, for instance, spends less than 6 or 7 rs. a month. He has also allowed as assistants one or two Barahils, or Gorayits, who watch the crops on the thrashing floor, collect money, and distribute water from the reservoirs and canals. These messengers are allowed each from $1\frac{1}{4}$ to 2 rs. a month. Under the Gomashtah are also one or two Dosads, Chaukidars, Pasbans, or watchmen, who guard his house at night, and in the day collect money. These in some places are allowed each from $\frac{6}{10}$ to 1 bigah of land free of rent, and as much land for rent as can be cultivated with one plough. In other places their allowance of free land is much more considerable, but they have no farm. The people of the villages give them presents, as they visit the whole houses at night, and prevent stealing. This is the whole regular establishment on the part of the owners of land, and amounts to a mere trifle; but, where the money rent is fixed on the kind of crop that is cultivated, or where the division does not actually take place between the landlord and tenant, but the

amount to be paid is settled by a kind of arbitration, a survey becomes necessary. The surveyors receive 9 or 10 anas a day for each set of four or five men; but these value about 50 large bigahs a day, so that this expense also is a mere trifle. The usual set employed to make these surveys consists of the following persons:—1st. An Amin, or chief surveyor, at 4 anas a day; 2d. A Nuvisindah, or clerk, at 2 anas a day; 3d. A Sales, or mediator between the Amin and tenant, at 2 anas a day; 4th. A Juribkas, or person who measures with the rod, at 1 ana a day. Two Juribkases are, however, most usually employed, making in all five persons at 10 anas a day. In some places the tenant gives the whole party food; but in others he feeds only the Sales and Juribkases, through whose favour he chiefly expects advantage. Notwithstanding this numerous establishment, it is not often that the Amin makes an actual survey. He and his attendants look over each farm with the tenant, and they make a calculation by conjecture of the extent and value of each kind of crop. This is the proper Hustbudi; when an actual measurement takes place, it is properly called Surasuri; but resource is not often had to this troublesome expedient. In some places, where the tenants are not tractable, the surveyor and they pitch upon some plot of each field as being of an average goodness, and this is reaped before the surveyor as a means of determining the whole produce. The Sonar, or goldsmith, called also Hatuya, is likewise an irregular part of the village establishment, being employed to weigh all grain, both at the division of the crops and when any is sold to the trader, either by landlord or tenant. He is often not a goldsmith by profession, and is usually paid by the purchaser at the rate of from 1 ser to ¼ ser of the grain on every rupee's worth sold; and on this account his commission is seldom considered as an expense to either landlord or tenant. The hereditary mendicants (*birti*), which are a burthen on most estates, are usually supported by receiving a portion of the goldsmith's commission, so that their being a burthen on the land usually escapes notice, and in some places they are indeed supported entirely by voluntary contribution, for procuring which they hang on about the thrashing-floors of their respective villages. They usually spend at the rate of 60 or 70 rs. a year. Most of them are Dihi Brahmans, but some

are Dasnami Sannyasis, and a few are followers of Nanak. This commission, and the selling much of the grain, when the market is glutted, tends to keep the nominal harvest price at the low rate at which I have stated it in the tables of produce; and in fact a great proportion is sold at that rate, although prudent men receive a much higher.

The chief of each village (*Mauza*), who is here usually called Mahato, or Jethraiyat, holds his office by hereditary tenure, and does not league with the owners of the land to oppress the tenants, but in general supports their interests; and, being a wealthy man of some education, assists the poor and illiterate in settling their accompts. In all well-regulated Indian governments this is the proper duty of such persons; and it appears to me that in Bengal these persons might be rendered highly useful by making them entirely independent of the Zemindar, and removeable by government on an application from the majority of the tenants under their protection, whose wishes with regard to the succession should in all cases be supported. At the same time, these chiefs of villages should be secured in all the emoluments which they have hitherto received, and for which most ample deductions were made to the Zemindars at the settlement. On some estates the Mohato is a kind of security for all the tenants, and when one of these goes away, it is he that appoints a new one, the owner of the land giving himself no trouble about the matter.

In most of the larger estates a great proportion of the rents are farmed, which, with the system of letting the lands by a division of the crops, is absolutely necessary to prevent collusion between the tenants and agents of the owners. The same practice prevails also, although not to such an extent, even where the estates are very petty, and where no just cause can be assigned for its continuance. These renters are here called Thikadars, and are quite the same with the Mostajers of the north of Bengal; but in these districts there is a class of men called Mostajers, who are totally different, and who have lent money to the Zemindars. These have agreed to give them the management of the whole estate as security, and the Mostajer, besides 12 per cent. per annum for his money, takes one half of all the neat proceeds of the estate, until he is repaid. In some parts one-fourth of all the

assessed lands is burthened in this manner, and only one half remains in the management of the owners. Few of the Thikadars here are men of power, which renders their yoke less oppressive; and the complaints that I heard were chiefly against those of the tribe of Domkatars among the military Brahmans, who, from having been long the leaders in the anarchy which prevailed before the English government, have acquired a name that still conveys a good deal of terror. The smaller Thikadars require no other establishment than that usually attached to villages as above described; the larger ones require only the addition of one or two clerks and watchmen. They contract to pay a certain sum for a certain number of years, usually from 3 to 10, and defray every expense, even that of forming and repairing the canals and reservoirs, used in watering the land. The former is, of course, generally neglected, and sufficient attention is seldom paid to the latter; and, were there no other, this is a very strong objection to the system.

Although the people of this district are very cautious in speaking of their affairs, it is very generally admitted, even by themselves, that the owners of the assessed lands have very considerable profits; nor do they scruple to admit that it far exceeds the estimate of one-tenth of the revenue, which was supposed to be the profit that they were to have by the settlement. In fact, it in general, I believe, far exceeds the total amount of the revenue. The assessed land has not yet, however, become a very saleable property. Within these five years, the collector of Behar has put up to public sale 77 lots, paying an annual revenue of 33,777 rs., and the whole price has been 53,152 rs.; and for no less than 10 of the lots no bidder appeared, and the land fell into the Company's hands. This shews that the settlement made by Lord Cornwallis is not a security for even the revenue, which he rendered perpetual. It would not, however, be fair to bring the sales made by the collector as giving a just idea of the value of the assessed lands; because, in making the assessment, and in proportioning subsequent subdivisions, the roguery of some of the persons employed has thrown a heavy part of the assessment on peculiar lands, so that these are no longer worth the possession. Other estates have lost so much from rivers, that they have been reduced to the same state, and it

is such land chiefly that is brought to public sale. A gentleman in Patna, who has purchased 10 bigahs of free land for building, told me that with the utmost pains it cost him 2,000 rs.; but it would let at least for 20 rs. a bigah, so that he gave 10 years' purchase; and I am assured that, in that city, most of the assessed land sells very little lower (perhaps one-eighth) than that which is free; for lands that are not over-assessed are seldom brought to public sale, except when some great zemindar has been entirely ruined by mismanagement, or for the purpose of defrauding creditors.

OF PARTICULAR ESTATES.*—Except one Pergunah named Mulki, the whole belongs to the Mogul territory of Serkar Behar in the province of the same name. Mulki is under the authority of the judge and magistrate of Behar, but pays its revenue to the collector of Tirahut, and seems to have originally been a part of the Serkar or Barony so named; but it is not mentioned in the Ayeen Akbery. Mulki contains about 12 square miles, leaving 5346 for the part of these districts belonging to Serkar Behar. Two measures are almost every where in general use. One by which every one reckons in common affairs, and each pole of which is three Sekunduriguz long, and the bigah is 20 poles (*Kathas*) each way. The poles, which I have tried, were about eight feet four inches long, more or less, as usually happens owing to the rudeness of the workmen. This common bigah is therefore about 27,779 square feet. But in the revenue accompts another bigah was introduced by a Lodikhan, when that person estimated the extent of the whole of Serkar Behar. Sixty of the common bigahs, according to the people of the collector's office, are equal to 100 of Lodikhan, which therefore contains about 16,660 square feet. The reason of the people choosing to reckon by a bigah different from what is used in the public records, is evidently owing to the fear of an actual measurement, as the whole of these districts do not contain near so many customary bigahs, as are registered, although several very extensive portions have not been measured. Many persons especially those who enjoy free lands, have probably much more than their measurement of Lodikhan's bigahs; but, if a new measurement were proposed, they would no doubt pretend, that the measure referred to in their grant was that customary in the country. I understand that some of the owners of free land have introduced on their estates a bigah still larger than usual.

Pergunah Azimabad comprehends the whole of the city of Patna, the greater part of Phatuha, and a small part of Bakipur Jaywar. In the Ayeen Akbery it is called Patnah (Gladwin's translation), the name Azimabad having not then been invented. According to the public accompts

* Several particulars relating to the private management of estates are given from the survey of Dr. Buchanan as affording an indication of the state of the country and of its people.—[ED.]

it contains about 1,10,644 bigahs, of which 53,982½ are not passed. According to the space, which it occupies on the map, I calculate, that besides rivers, roads, &c. it contains about 2,27,000 bigahs of Lodikhan's measure, that is more than double of what it was supposed to do, when assessed. Allowing, that the free and assessed lands have shared equally in the profits, the former will in fact amount to 1,10,800, leaving almost 57,000 bigahs, that might probably be recovered, if the proprietors are entitled to hold no more than the extent mentioned in their grants. And, if the present occupants were allowed to retain this surplus, at the rate laid on what is assessed, they would have little reason to complain. The assessed land in the same manner I calculate at 1,16,700 bigahs, which pay 56,347½ rupees, and are burthened with 1561 bigahs granted to the invalid establishment, and these are equal to about 3000 of Lodikhan's measurement, nor have they as yet made any considerable return to the landlord. They may therefore be said to pay 56,347½ rs. for 1,13,700 bigahs, or 1,31,600 of the Calcutta measure, of which they have therefore 2 3-10ths. for the rupee. A small portion however, in and round the fort, and consisting chiefly of shops, belongs immediately to the Company, and is farmed out at 2025 rupees a year under the name of Mahal keladari, but this will make little difference on the above calculation. The whole is most completely cultivated, the industry excited by this demand having been sufficient for the purpose. The assessed lands are divided among 84 families, many of which have subdivided into various branches, that still manage their estates in common. Their profit must be very great; 1,31,600 bigahs Calcutta measure are equal to 68,220 of that, by which lands are now usually let; but the lands in the immediate vicinity of Patna, amounting to about 1-6ths. of the whole are let at a money rent of from 5 to 25 rs. a bigah, besides some very high in the chief market places. I do not think, that the average for this part can be taken at less than 12 rs. which will give 120,000 rs. a year. In the more remote parts the land is divided into three hinds, Uprar or high, Diyara or islands, and Tal or inundated. The Uprar amounting to 5-16ths. is all let for money rent, at the following rates; 1st. quality from 3 to 7 rs. a bigah, 2d. quality from 2 to 3 rs., and 3d. quality from 1½ to 2 rs. The average of these cannot be short of 3 rs. a bigah, which will give 54,600 rs. The Diyara, amounting to 2-16ths. of the whole, is also mostly let for money rent, at 3 rs. for the first quality, at 2½ for the 2d., at 2 rs. for the 3d., at 1½ for the 4th., at 1 r. for the 5th, at one-half r. for the 6th. and at one-quarter for the 7th. The average may be 1½ r., which will give 10,800 rs. The Tal amounting to 9 anas of the whole, is also let chiefly for a money rent (called here *Hust-budi*), but some by a division of the crop. The rate of the former is fixed by the nature of the crop; rice from 3 to 4 rs. wheat 2½ rs. other winter crops 2 rs.; but it is usual to grant a deduction of 10 per cent. on the amount. The crops, which pay by a division, are chiefly pulse, and of little value, so that on the whole the average rate may be 2½ rs. giving in all 81,050 rs. The total gross rental will be about 2,66,000 rs. There are no reservoirs, and only a few canals, the expense of which is very trifling; so that this with all charges of collection cannot exceed 10 per

cent., which with the taxes will amount to about 83,000 rs., leaving a neat profit of 1,83,000 rs. Deducting the utmost, that can be allowed for ground given free of rent, for houses, the clear gain will be more than double the revenue. The assessment it must be observed is high, and the tenures good, by far the greater part being let for a fixed money rent, and cultivated in whatever manner the tenant pleases; and scarcely any of the rent is farmed.

Pergunah Phulwari (Phoolwari Glad) is a fine estate, composing the greater part of the division of Bakipur-Jaywar with a very little scattered in the division of Arwal. In the public accounts it is supposed to contain 68,952 bigahs of Lodikhan's measurement, of which 25,565 are not assessed. According to my estimate this estate, besides rivers, roads, tanks, canals, broken corners, &c. contains 1,24,100 such bigahs; and, if such be the case, the free land may probably have grown to 46,000, and the assessed may contain 78,000 of such bigahs, which pay annually 39,016½ rs. or very nearly 1 r. for 2 Calcutta bigahs, which is a higher rate, than in the immediate vicinity of the town of Patna, with so little regard to equality has the assessment been conducted. It is even alleged, that the free lands actually amount to one-half of the whole. In which case the assessment will be considerably higher. The whole estate is cultivated with the utmost pains, as might be expected. The assessed lands in the public accounts are divided into 70 lots, belonging to a number of Maleks, mostly decent looking peasants. Only about one-eighth of the land pays a money rent, chiefly the land near the houses occupied with sugar cane, rice, wheat, barley, poppy, cotton, and vegetables. It pays from 1½ to 8 rs. a bigah of the country measure, probably on an average about 3 rs. which will be about 1 9-6ths rs. for one of the Calcutta standard. The remainder pays by a division of the crop; after deducting the harvest, the master taking nine parts, and the cultivator seven. The average produce of such land may be worth about 3 rs. a Calcutta bigah, deducting 11½ per cent. for the expense of the harvest, there will remain 42½ anas, 9-16ths of which are equal to very near 1½ r. for rent. Upon the whole the gross rent may be about 1½ r. and the revenue may be one-third of the amount; but besides the expense of collection, usual in the districts hitherto surveyed, the landholders here have had to construct and keep in repair a considerable number of reservoirs and canals, although not so many as in the southern parts of these districts.

Geyaspur (Ghiasspoor Glad) is a very great estate, comprehending almost the whole of Bar, a very large share of Duriyapur, a considerable portion of Helsa, and a small part of Phatuha, all along the banks of the Ganges; and in the interior it has a great deal in Sheykhpurah, and a little in Behar. In the revenue accompts it is stated to contain 4,60,586 bigahs of assessed land, and 2,26,737 bigahs that are free. It is alleged, that the river has made considerable encroachments, and from the appearance of what it would appear to occupy on the maps, I can scarcely think that it contains more than the records state. The assessed land pays only 83,887 rs. a year; but it has been burthened with 5,559 bigahs for the invalid establishment, equal to about 10,800 of Lodikhans measure. Deducting

these, as having hitherto produced little or nothing to the proprietors, they will have 62 bigahs Calcutta measure for 10 rs. Owing to this assessment, it is not so fully occupied, as the estates hitherto described; the cultivation is careless, a good deal of pulse being sown in the mud without ploughing; and the average produce of a Calcutta bigah is not estimated at above 2 r. 12 a. It is divided into 212 lots, the owners of which as usual are called Maleks, and are mostly military Brahmans, whose families claim possession for many ages, and who are a bold turbulent race of men. I am assured by a venerable invalid officer, that when he first received land, a great part of the vicinity was waste, and infested with the tiger, rhinoceros, and elephant. These destructive animals have since been banished, and all near the Ganges has been entirely cleared; but in the interior, owing to the lowness of the assessment, there is still some waste, and the cultivation is careless, nor has any considerable number of reservoirs been constructed for watering the land. The same officer informed me, that near the river no land was let for less than 1 r. and much brought three times that sum for the customary bigah, which is at the rate of from 8 1-3rd anas to 25 8-10ths anas for the bigah of the Calcutta measure. The lands there liable to inundation, and sown without cultivation, are mostly let by a division of the crop, and produce a trifle; where regularly cultivated, they rent almost as high as the elevated banks of the Ganges. The leases are from five to nine years, but the tenants pretend, that they must be renewed on the same terms. It is however said, that Mr. Smith, lately judge of the district, gave a decision to the contrary; and, as I have said, it is highly expedient, that such should be established as the law. Scarcely any of the rents are farmed; and it is owing to this probably, to the high rents, and to little of the rent being paid by a division of the crop, that the estate is in such a good condition; for the assessment is much too low.

Haveli-Behar (Bahar Glad) is a very fine estate, situated chiefly in the division of the same name; but it has also a considerable portion of Sheykhpurah, some in Bar, and a trifle in Helsa. In the public records no estimate is to be found of the extent of its assessed lands; but it contains 32,955 bigahs, which pay no revenue. So far as I can judge from the extent of the map, it would appear in all to contain 2,05,000 of Lodikhans bigahs; and, allowing that the proprietors of the free lands may in reality occupy 40,000, the assessed will be 1,65,000, which pay 80,164 rs. so that the owners have 238 Calcutta bigahs for 100 rs. The assessed part is divided into 174 lots; but many of the Maleks have lost the management of their estates, and receive from the present Zemindars or from the occupants of free land one-tenth of the neat proceeds. Very little of the rent is farmed; three-quarters of the rent are paid in money, one-quarter by a division of the crop. The leases specify the number of bigahs, and the rate, that is to be paid, the money not being fixed, by what is called Hust-budi, while the landlord in the division of crops takes nine-sixteenths of the produce. The leases are seldom renewed, so that the tenants are moveable at will; but this is seldom attempted, nor has the rate been of late raised; six-sixteenths have been added to the cultivation

since the settlement; and many reservoirs having been formed, the crops have become more valuable. The rates are as follows:—1. Transplanted rice from 2 to 6 rs. a customary bigah. 2. Broadcast rice, 2 to 3 rs. 3. Maruya, 3 to 5 rs. 4. Milet and maize, 2 to 4 rs. 5. Kodo, 1 to 1¼ rs. 6. Sugar cane, 5 to 13 rs. 7 Poppy alone 5 to 17 rs. The rate by the Calcutta bigah is rather more than half the above, and I was assured by a man, who had 49 bigahs customary measure, that this rent came to 225 rs. a year, which is at the rate of 2 rs 6 a. for the Calcutta bigah. The average produce of a Calcutta bigah is valued at 3 rs. 12 a. which, compared with the produce of the low assessed estate of Geyaspur, will show the loss which the country sustains by a too low assessment. The tenants also near Behar, I will venture to say, are less necessitous than in most parts of these districts, three-fourths of them paying their rent from their own stock, and selling their produce at favourable seasons, which will raise the value of the average produce at least one-fourth part. The Mohato, whose farm contained 49 bigahs, as above mentioned, said that his landlord had five-sevenths, and he had two-sevenths of the neat proceeds, that is, he had a clear profit of 90 rs.

The Tikari Raja has a principal share in several estates, but how much I could not learn, as the whole of his affairs are managed with much secrecy. The Tikari Rajas are military Brahmans, chiefs of the Domkatar tribe. Until lately, the family seems to have been in great obscurity, from the time of the Muhammedan conquest at least. Vir Saha was the first person who obtained a small zemindary about the time when the Mogul government first began to decay. His son, Sundar, was contemporary with Khamgar Khan of the Mayi family, and being a person of similar manners, active, bold, valliant, faithless, and cruel, he succeeded equally in these turbulent times, and acquired a still more valuable estate, consisting of Ukri, Sanwat, Ikil, Bhelawar, Dakhnar, Angtri, and Pahara, with a part of Amrathu, which has been since lost, and a part of Maher still retained, and some scattered portions of other estates, all in the district of Behar, and several other estates in Ramgar. The family however had granted small parts of these estates to vassals or kinsmen, who supported this power, and these at this settlement were entirely alienated, and rendered independent. On the contrary the present owner, Raja Mitrajit, has made considerable additions by purchase. Sundar Saha lived much in the same manner as his adversary Kamgar, seizing on all lands within his reach, plundering those who would not join his standard, and paying nothing to government without being compelled by an army. He obtained the title of Raja from Muhammed Shah, and was assassinated by a Muhammedan servant named Goylamgous, the captain of his guard (*Jumadar*). Sundar left three sons, Buniyad, Futeh, and Nehal Singhas, the last of whom revenged his father's death by killing the murderer. Buniyad succeeded as Raja, and seems to have been a quiet man, and wrote to the English, promising obedience. This letter, it is said, fell into the hands of Kasem Ali, who having summoned the Raja to Patna put him to death, with his two brothers, and Tilak the son of an uncle. A few days before this event the wife of Buniyad had been delivered of a

son, named Mitrajit. Kasem Ali, hearing of this, sent a party to kill the infant; but the mother, having intelligence of their approach, put her child in a basket, and having covered him with the cakes of cow dung that are used for fuel, gave him in charge to a poor old woman, who passed unnoticed with the basket, and delivered Mitrajit to his father's chief officer, Dalel Singha. This person proved faithful, and retired to a fort near the hills, until the battle of Baksar, after which he presented his young charge to the commanding officer. Mitrajit, while young, lived much under the protection of some military officers of rank, and seems to have a sincere regard for the English nation. According to the family account, when Shetab Ray obtained the management of Behar, he sent inspectors (Amels), who allowed nothing whatever to the Raja, having trumped up false accounts, by which they made the Raja their debtor, and although they had the whole management of the estate, obtained a decree of the courts to seize even his private fortune for the arrears of revenue. This continued, until some time after Mr. Law was appointed Collector of Behar, when Raja Mitrajit was restored to his estates; but they were long disputed by the claim of a kinsman, named Pitambar Singha, now a very old man. The property was finally confirmed to Mitrajit by a decision of the king in council. Pitambar Singha has several estates, which he had probably received as an appanage, but I could not learn his pedigree, the whole affairs of this family being most carefully concealed. Mitrajit is a very prudent active man, and is supposed, besides his purchases, to have accumulated vast wealth; for, although on public occasions he makes a considerable show, in private he is said to be very frugal. Although he has two sons by his wife, it is generally supposed, that he will leave the greater part of his estates and wealth to a son, whom he has had by a Muhammedan girl, and who has been brought up in that faith. The Hindu sons are not brought into company, or rather are entirely kept out of it, while the young Moslem on all occasions accompanies his father. He is a very well behaved young man.

Perhaps 15 anas* of all the Raja's estates are let by an actual division of the crop, without employing people to value it, so that leases are of little value, as they extend only to that which pays a money rent, and this is generally confined to a small space round each village, that is watered from wells. The leases that have been granted have never been renewed, and most have been addressed to some chief tenant with an &c. for the others. As it would be impossible for the Raja to superintend such a collection, without suffering the most enormous losses, he has farmed out the greater part of his rents, and this has given rise to considerable complaints of oppression; nor is the cultivation on his estates so good as might have been expected, from the money he has expended in constructing reservoirs, canals and roads. Had his estates been let for a money rent, it might, with his prudence, have been managed entirely by his stewards without loss, and the tenants would have had no cause for

* The rupee is divided into 16 anas, and most things are similarly subdivided.—[ED.]

complaint, while the rent would have been a stimulus to industry; nor is there the smallest reason to think, that the Raja is in the least inclined to oppress his own tenants.

Masaura is a fine estate, mostly situated in the division of Vikram, but a considerable portion is in that of Arwal In the public records it is estimated to contain 1,81,377 bigahs, of which 1,70,427 are assessed, and pay 38,793 rupees. From the appearances on the map I should judge, that the whole extent will be about 2,27,000 of Lodikhans measurement, of which the assessed part may be about 2,14,000 bigahs, so that the owners have about 639 Calcutta bigahs for the 100 rs. The part in Vikram division is very fully occupied, that in Arwal is rather neglected. The Rani of Yasamanta, whose name on account of her sex it would be considered as disrespectful to mention, has a large share, reckoned in the public records at 59,353 bigahs, for which she pays 12,347 rs.

The Rani has two public offices for collecting her rents, one for Masaura is under the management of a kinsman, who conducts all her affairs, and is called a Tahasildar. Under him is a Dewan at 10rs. a month; five clerks *(Matsuddis)* at 5rs. each; one valuer of money at 5rs.; one Jumadar or chief guard at 4rs.; 30 Peyadahs or common guards at 2 or 3rs.; one record keeper *(Dufturi)* at 5rs.; one sweeper has 10 bigahs of land, or about 1⅗r. a month For Arwal pergunah she keeps one Tahasildar or steward at 20rs. a month; three clerks at 5rs. each; one cash keeper at 5rs.; one chief guard at 4rs.; ten or twelve guards at from 2 to 3rs. Besides this, owing to the unusual litigiousness of this part of the district, she has two agents *(Vakils)* at Gaya, who have 20rs. a month; an agent with the collector 10rs.; two agents at Patna for the Court of Appeal, one of whom has a salary of 5rs. and the other is paid by a commission on each suit. These are public agents known to the native officers of the courts, and called *Vakils*, but she keeps agents of another kind called *Mokhtars* or attorneys, two at Gaya, and two at Patna, each receiving 5rs. a month. Although, as I have said, the Rani is in debt, I am told, that she has purchased a part of Maner; but this does not appear on the public records, the purchase having been made in some other person's name, probably as a resource, should she involve herself so, that her proper estates must be brought to sale It is not unlikely, that the debts were contracted in order to make these purchases, which she has probably given to her own relations at the expense of her husband's estate. Giribaradhari an Atharba Brahman probably of the same family, has a considerable share of this estate, estimated in the public records at 10,740 bigahs; and he seems to be a person of some note, as his family has inter-marriages with the Raja of Betiya; and the Raja of Parsa, when I was at the place, had come to marry a daughter with a numerous attendance, and great tumult.

Maner (Mynerwa Glad) is a very rich estate, composing the whole of division Sherpur, and 2-3rds. of Vikram. In the public records it is stated to contain 1,83,451 of Lodikhans bigahs, of which 1,23,865 are assessed, and pay 64,098rs. The assessed part has been divided into 237 shares, and the registered proprietors amount to 458. The free land, stated in the public records to be 59,586 bigahs, is divided into 164 lots, and the registered

owners are 358. So far as I can judge from the appearance on the map, it contains 2,70,000 of Lodikans bigahs, the assessed proportion of which will be 1,82,000, so that the owners have about 33 Calcutta bigahs for 10rs. It is very fully cultivated. The parts which are nearest the Ganges, and which compose the division of Sherpur, consist of two descriptions of land, Dihi or high land near the river, and Baharsi or low inundated land at a distance from the bank. The former which produces crops similar to the high lands adjacent to Patna, is chiefly let for a money rent; a little of this is of the kind called Hustbudi, in which the maximum alone is fixed in the leases, and a deduction is made when the crops fail; but the rent in the greater part of the leases is called Harghasi, and is fixed. Most of the leases have expired, and it is said, that the judge of Shahabad has decided, that the tenants have a right to occupy in perpetuity at the same rate. This would appear to be in direct opposition to a decision given in the courts at Gaya; which would seem to show, that the law on this point is not very clear. The following are the usual rates of rent, for such land:

First quality, from 4 to 8 rs. = 33 $\frac{18}{100}$ anas to 66 $\frac{36}{100}$ anas.
Second ditto, 3½ rs. = 29 anas.
Third ditto, 3 rs. = 24 $\frac{89}{100}$ anas.

The lands in the inundated part are mostly let by a division of the crops. The average produce high and low is worth 3¾rs. a bigah. Scarcely any of the rents are farmed.

In the interior the country is mostly cultivated with rice, almost all of which pays rent by a division of the crops, and it is only the fields adjacent to the villages, that pay a money rent; one-fourth part of the rents are farmed, and the produce of a Calcutta bigah is estimated at 3¼rs.

Note.—Dr. Buchanan specifies in detail the other principal private estates, amongst which is that of Muhamed Bakur Khan (a sister's son of Seraju Doulah, formerly viceroy of Bengal and Behar), who lives at Tilarha in considerable splendour, and in frequent intercourse with Europeans, even at the festive board. The preceding information will, however, convey to the reader a general idea of the value of landed property in Behar, and its mode of management by the landlord—[Ed.]

CHAPTER VI.

STATE OF THE ARTS AND COMMERCE IN PATNA AND BEHAR.

First Division of the Arts.—Some of the architects who were brought from Jaynagar to construct the temple of Vishnupad, at Gaya, still remain in this town, and possess some science. In the account of the building, I have already described its curious structure; and it is to be regretted that the subdivision of property, and other circumstances, have prevented the Hindus of these districts from employing these workmen in the line of their elegant art, for they are very capable both of planning and executing buildings that would be highly ornamental. Tekchand, the chief artist, says that he has six books treating of his profession. These books which are composed in the Hindi dialect, with a very great intermixture of Sangskrita, are attributed to Viswakarma, the god of artists; and the following account of them is taken from what Tekchand says. 1st. Khengranawe, in 18,000 couplets (*slokas*), gives an account of the manner of constructing houses and temples, and of ascertaining the fortunate times for laying their foundation. 2nd. Kesraj, in 3,000 couplets, gives an account of images. 3rd. Prasadmandal is a large work; but Tekchand possesses only 500 couplets. It treats on the various forms of temples. 4th. Rupmandal is also a large work, of which Tekchand possesses only a fragment. It treats on the form of images. 5th. Vastusastra, in 2,000 couplets, gives an account of the forms of houses. 6th. Rajballabh, in 1,400 couplets, treats of the same subject.

From the above list of books, it will appear that the same artists are architects and statuaries; and, in fact, they have made a few images, at Gaya, of very fine white marble brought from the west of India. In this art they are very inferior to their proficiency in architecture; and they are now little, if at all, employed in this line. The present inhabitants, when they wish for an image, take any one that comes first to hand, in a ruin, and in the selection they pay little or no regard

either to sex or attributes. Many of these old images are in a better style than any I have yet seen in India, except one or two at Mahabalipura, near Madras; but they are very far indeed removed from European ideas of perfection. The images made of clay, used so commonly in Bengal, are not in fashion in Behar, except with the few Bengalese settlers in Patna.

The painters (*Mosouwer*) possess a good deal more merit than those in the districts hitherto surveyed, although they are as far behind Europeans as the statuaries are. They have many sets of miniatures representing the princes of the house of Timur, and, especially in the minute attention to various parts of dress, these are well executed. They also sell various groups, representing Indian scenes and customs, in which some attention is even shewn to exhibit the effects of light and shade; but I suspect that they are copied from the drawing of some persons who have been acting under European guidance, and that they could not make any new drawing in which attention was paid to these circumstances. They are all Hindus, and are very superior workmen to the painters that were employed in the palaces of Tippoo Sultan. An inferior description of painters are at Patna, called *Nukkash*. They entirely resemble in their style the daubers of Puraniya, but are much employed to disfigure the walls of the galleries in front of the houses, that serve as shops, or for receiving strangers.

Music, in respect to quantity, is on a very thriving footing. The wives of the men, who beat the Nahabat, are in general the Mirasins, and are much employed. Some of them are called Rajpatras, and are of a dignity superior to the common. There are five or six girls in each set, part singing and dancing, and part performing on musical instruments. A set receives from 2 to 10 rs. for an evening's performance, and their songs are chiefly of an amatory nature. At Patna five sets of the dancing girls called Bai have considerable celebrity, and are considered by the natives as very accomplished. Two of them are Hindus, and three Moslems. Mahtab, the chief singer in one of the former, is in the highest request. Like the others, she usually goes to Calcutta during the Durgapuja; and, when she first appeared, being about 15 years of age, she had 1,000 rs. for the three nights' performance! She is now about 36 years of age, and her price is reduced to

700 rs., her personal charms having had as much influence as her voice or motions. On ordinary occasions, at Patna, these good sets are usually paid 15 rs. for a night's performance. The lowest sets are allowed 5 rs. The ordinary nightly hire of the sets in the country is from 5 to 3 rs. None of the regular sets of dancing boys, called Bhakliyas, have a fixed residence here; but many come from Benares to celebrate the Holi. Very few are employed to sing the praises of either gods or saints. Some men sing, and play on a kind of guitar (Tambura).

At marriage ceremonies, women of character sing, those of rank assembling in their own houses, and the poor walking in procession; but the performance on any musical instrument, or dancing, would be considered as highly indecorous.

In the country, few men are guilty of the indecency of singing or performing on musical instruments; but in Patna and Gaya many wealthy people indulge themselves, the young, worldly and giddy youth singing love songs openly and without shame, while men of learning and sanctified birth sing hymns. Rama and Krishna, however, even with these are the favourite t emes, and these deities were not ascetic.

Artists employed about the Persons of the Natives, or working in perishable Materials.—Few of the washermen are here Muhammedans. They are not so poor as in Puraniya or Bhagalpur, and in general live better than common labourers; and many who are employed to bleach the finer cloths make good wages; for instance, in the Company's factory at Jahanabad, 75 men are employed. They receive from the factory soap, soda, lime, and the requisite implements, and are allowed $1\frac{10}{16}$ rs. for bleaching a score of pieces (28 to the score), 40 cubits long by 2 broad. The cloth is fine calico of a close fabric, and is boiled, steamed, and smoothed by beating it with a beetle (*mungri*) on a smooth plank. Four men usually work in company, and on an average bleach four score a month; so that each earns 19½ rs. a year. Their women wash the clothes of the people in the vicinity, and may earn 12 rs. a year. The whole expense of bleaching one score = 560 yards, are as follows:—

To washerman's hire, 1 r. 10 anas; to 4¾ sers (9¾ lbs.) of soap, 12 anas; to soda, 6 pices; to lime, 9 pices:—2 rs. 7 anas, 3 pices.

The washerman furnishes fuel, which he gathers. In

the divison of Arwal, where the Company has some cloth bleached, the washermen in a similar manner are allowed a certain sum for the score of 28 pieces, according to the size; and the agent furnishes soap, lime, and soda, while the washerman's wife collects the fuel, and is said to do no other work. The larger pieces (*barabana*), which are 22 yards long by 2 cubits wide, cost 2 rs. $5\frac{1}{4}$ anas for the workman, 13 anas' worth of soap, $\frac{1}{2}$ ana's worth of soda, and $\frac{3}{4}$ ana's worth of lime. Total expense for bleaching 28 large pieces = 3 rs. 3 anas, 6 pices. The washerman usually washes this quantity every month, so that the whole of his and his wife's earnings in the year is 1 ana short of 28 rs.; the pay being higher than at Jahanabad renders them less industrious.

At the Company's factory, again, at Behar, each man and his wife usually work together, and in a month wash 2 bales (*bokchas*), each containing 35 pieces, nearly of the same size with the pieces at Jahanabad, but rather longer and narrower. The allowance is from $1\frac{3}{4}$ to 2 rs. a bale, but the bleacher finds fuel, lime, and soda, the two former of which he must purchase. The bleachers, therefore, make about $3\frac{3}{4}$ rs. a month, for which about half a rupee must be deducted, for what they purchase, leaving 39 rs. for their yearly gain. The expense of bleaching the bale including soap is about $2\frac{14}{16}$ rs.*

Soap is here made to a considerable extent. The following estimate was given at Behar, where the greatest number of the manufacturers is settled:—

Take 42 sers tallow, 5 rs.; 16 sers linseed oil, 1 r. 10 anas; 2 sers lime, 2 anas; 8 sers impure soda, 6 anas; firewood, 4 anas:—Sers, 67; 7 rs. 6 anas:—Produce 84 sers of soap like the lumps mentioned in my account of Bhagalpur, 11 rs. Average profit, 3 rs. 10 anas.

Each boiler makes this quantity twice a month; but two families, on an average, join about each boiler, as they also burn and sell lime. At this rate the 77 families in this district would make annually 77,616 sers (159,300 lbs.), worth 10,274 rs. This quantity, however, seems to be greatly underrated; and it is probable that, except a few families who make lime as in Behar, each has a boiler; for Patna soap is used all over Bengal. At Gaya, indeed, I received a very

* These details are given for comparison with similar trades in England.—[Ed.]

different estimate, and one which appears more rational. It was said that each man could make 40 sers (72 s. w. each), or almost 77½ lbs. in from three to four days. Allowing for sickness and other avocations, we may calculate that he may make this quantity seven times a month. The materials and fuel for 40 sers cost 4 rs. 8 anas, 6 pices, and the value of the article is 5 rs. 8 anas; so that he makes a profit of 6 rs. 12 anas, 6 pice a month, and his soap will annually be 6,500 lbs. But allowing only one man for each of the 77 houses in the district, the quantity made will be more than three times that stated in Behar, that is to say, about 500,000 lbs., worth about 35,000 rs. Wax candles are made by seven houses. The material comes chiefly from Nepal, but some is brought from Ramgar. The candles are of different qualities, according to their whiteness and purity worth from 45 to 55 rs. a *man* (76 s. w.), or 76½ lbs. They are very inferior in appearance to the candles made in Europe.

The torch-makers (*bari*) are a numerous class. They make their torches, as usual, of cotton rags, that they chiefly procure from the dead bodies of Hindus, which, before they are placed on the pile, are stripped naked, and the cloth is thrown into the river, from whence it is collected by the Dom, and sold to the torch-makers. But these Baris, although they work in this impure material, gain their chief living by making a kind of platters of leaves, which, although stitched together by their dirty hands, and although incapable of being washed, are considered as perfectly clean by the Hindus, who would shudder at the idea of eating from a vessel of china ware, queen's ware, or glass, least it had been used by an impure person. The leaves chiefly used here are those of the *Butea frondosa* (Roxb.) (*paras*), from 6 to 12 of which are required for each platter. A man and his wife may make 3 rs. a month.

The gay and dressy youths of Patna employ certain men, named Pagriband, or Dustarbund, to wrap their turbans in a fashionable manner. The turban preserves its shape so long as it is clean; but it is often unfolded either to be washed or fresh dyed. These people make from 3 to 5 rs. a month.

Tailors, owing to the prevalence of the Muhammedan and west country dresses, are numerous and well employed; and a man can make from 3 to 6 rs. a month, besides what his women gain by sowing or spinning. Several of them are

Hindus. The tent-makers work in the same manner as those in Puraniya.

The barbers here are on the same footing with those in the western parts of Bhagalpur; but none of them have studied anything like science. Some of them, chiefly Moslems, are a kind of barber-surgeons, very rash and ignorant. They extract blood by a kind of cupping, there being here none of the Hela caste, who in Bhagalpur perform that operation. Leeches are applied by the women of the sweepers.

The Abirgars live in part by making the red starch, which is thrown about at the festival called Holi. The starch prepared at Daudnagar is made from coarse grain, and is very inferior to that prepared from the root of the scitamineous plant called Tikhur. The following they give as their process: take 1 *man* (45 s. w. = 1 ser, $49\frac{1}{8}$ sers = *man*) or $45\frac{69}{100}$ lbs. of the grain of the Gehungya Janera (*Holcus Sorghum*), worth by retail 8 anas, and of Lodh bark 10 sers (9 lb.) worth 4 anas. Grind them to a powder in a hand mill. Take $6\frac{5}{16}$ sers (6 lbs.) of sappan wood worth 8 anas, and $1\frac{1}{8}$ ser ($1\frac{1}{8}$ lb.) of impure soda worth 1 ana. Divide these into four portions, and boil each in 10 sers (9 lbs.) of water. The flour is first thrown into one pot of the decoction, and after standing a little the paste is made into balls, which are dried in the sun, then broken, and thrown into the second pot of the decoction, and dried again. This is repeated, with the third and fourth pots, when the operation is completed, and produces one *man* of the Abir or red starch, which is worth $2\frac{1}{8}$ rs. The above materials cost $1\frac{5}{16}$ rs. fuel costs 2 anas, and 4 labourers cost 8 anas: the total cost therefore is $\frac{15}{16}$ rs. the profit 9 anas.

The red lead made is not of the best quality, but supplies a great part of the demand of the country; it is used for female ornament, and as offerings to the gods. Vermilion is used as a paint in finer works; and rich women occasionally add some to the red lead, with which they paint their foreheads.

Those who prepare ornaments of lac are numerous, and are all Hindus. Each family may gain from 4 to 6 rupees a month.

Those who make ornaments of the kind of glass called Kangch are numerous, and are all Muhammedans. The

saline efflorescence is collected (from the middle of November to the middle of February), and thrown into a cistern or reservoir lined with smooth kneaded clay. The cistern is then filled with water, and this is allowed to evaporate by the action of the air, which requires from 10 to 12 days. When dry, the bottom of the cistern is found covered with a thick saline crust, a considerable part of the earth, with which the soda was originally mixed, having subsided, before this saline substance began to separate from the water. This soda makes glass without addition, as it contains a great portion of earthy matter. The people of this profession allege, that they cannot make more than two rupees a month. The Tikisaz make small ornaments of mirror, which the native women paste on their foreheads between the eyes. The glass is thin, and of various shapes and sizes. The tinfoil is only pasted to the glass, and is painted with various bright colours to make a show. From 200 to 2,000 of them sell for a rupee. The ornament is fixed on the skin by means of a little bee's wax. The Minamorussas make false stones for rings. They also give various colours to gold and silver, that are highly ornamental in the handles of swords, and other such work. They paint on glass and make mirrors. The Shishahgurs blow glass. The material consists entirely of European glass-ware; but, although they only use the fragments of the finer kinds, their work is rude, owing to the imperfection of their furnace, the glass is usually filled with air bubbles, waves, in nobs, and every other imperfection: it even in general loses part of its pellucidity, and acquires a greenish colour. They however allege, that with pains they could make glass as clear as the European, and could form anything for which there was a demand; but they have no encouragement, as the natives require only bottles for holding rose water, and phials for containing essences; and will go to no price, that can be possibly avoided. In each furnace they usually put five sers of powdered glass (that of wine bottle is considered useless), and to melt this requires 200 sers of fuel.

A few people live by making ink, which is kept both in a liquid and solid form. 95 s. w. of linseed oil give 4 s. w. of lamp black collected by an earthen lamp. Take 4 s. w. of lamp black, 5 s. w. of gum of the Mimosa Indica, add a little water, and rub in an iron mortar with a wooden pestle for 3

hours; then infuse $1\frac{1}{8}$ s. w. of gall nuts in 10 s. w. of water, and add the strained infusion to the rubbed materials. Then rub again for 3 hours, then put the pot into the sun, until the paste dries sufficiently to admit of its being made into small lumps, which are dried in the sun. These cakes do not spoil by keeping a considerable time.

Those who make a separate profession of thatching houses, also cover roofs with tiles. In fact, in most tolerable houses the roof is first thatched with straw, and the tiles are laid on above the thatch. The heat otherwise would be excessive; but the practice no doubt greatly increases the danger from fire.

A considerable quantity of paper is made at Behar and Arwal. It is whiter than that made in Ronggopur; but has all its other imperfections, and that of Behar especially is less durable, while the least dampness in the air occasions common ink to sink, so as to form almost illegible blots. It is only ink made of the cakes prepared as above-mentioned, that can be used with such paper. At Behar the paper most commonly made is that called Dufturi, which is 19 by $17\frac{1}{2}$ inches a sheet, and is that used in common business; but other kinds of a larger size, and rather superior quality are made, when commissioned. The material is old bags of the Crotolaria juncea. These are cut into small pieces, and, having been soaked in water, are beaten with the instrument called a Dhengki. The pulp is then put on a cloth strainer, washed with water, and dried on a rock. This substance is then put into a cistern with some ley of soda, and is trodden with the feet for some hours, after which it is in the same manner washed and dried, and these operations with the soda are in all performed six times. The bleached pulp is then put into a cistern with a large quantity of water, and is diligently stirred with a stick for about three-quarters of an hour, when it is wrought off into sheets as usual. The moist sheets are stuck on a smooth wall, and dried. Having been rubbed with a paste made of flour and water, they are then smoothed by placing them on a plank, and rubbing them with a stone. The expense and profits of making seven reams are as follows:

Forty-two sers ($86\frac{1}{4}$lb) of old bags, 2rs.; 42 sers impure soda, 2rs.; 42 sers lime for making the ley, 1r.; labourers for beating with the Dhengki, 1r. 12 anas; a man to stir about the materials, 8 anas; pasting and smoothing the paper with a stone, 5 anas; flour and fire-wood for making

the paste, 2 anas 6 pice; drying the sheets, 4 anas; cutting the paper, 6 pice.—Total, 7 rupees.

The ream consists of 10 quires, each containing 24 sheets, and sells by wholesale at 8¾ rs. so that the maker has 1¾ rs. profit. He does nothing but form the sheets, taking them as usual from the cistern on a frame, which retains the paper, and allows the water to escape. He makes about one ream a day; and, if he works 315 days in the year, he will earn about 80 rs. a year; and in fact, these people are in easy circumstances. In the 30 houses at Behar are 100 men, and in the 13 divisions exclusive of Arwal, that are in the district, there are probably 40 houses, or in all 140 men, who, at the rate above-mentioned will make paper to the value of 32,000 rs. a year.

At Arwal 20 families keep an equal number of beaters *(dhengkis)*, and the estimate, which I procured, depends on the work performed by each of these. On the opposite side of the Son river however, in Shahabad, are 50 beaters, and the whole produce of these is sold as Arwal paper, which although made of the same materials is whiter and more durable than that made at Behar, and is commonly used by Persian writers all over Bengal. Each beater usually makes five bales in the year; and each bale contains 20 reams.

Two bales of the first quality at 4rs. a ream, 160rs.; 2 bales of the second quality at 3½rs. a ream, 140rs.; 1 bale of the third quality at 2½rs. a ream, 50rs.—Total, 350 rupees.

The total paper therefore made by 20 beaters will be worth 7,000 rs. The following is the statement, that I procured, of the annual expense attending each beater:

To 2,620 sers (46 s. w.) or about 3,069lb. of old bags or nets, which are still better, 57rs. 8 anas; to soda 2,340 sers, or 2,762lb., 45rs.; to lime, the same quantity, 30rs.; to flour for paste, 5rs.; to cloth for strainers, baskets, &c. 2rs.; to moulds, or frames, 1r. 3 anas; to labourers for beating, &c. 80rs.; to working off the sheets, 25rs.; to drying and smoothing, 7rs. 15 anas 6 pice; to pasting, 5rs.; to cutting and packing, 15rs.—Total, 286rs. 6 anas 6 pice.

The neat profit therefore on each beater, besides paying every person for his labour is 73 rs. 9 anas 6 pice. The materials are divided into five equal shares, each capable of making one bale. Under the beater of the implement is a small cistern, the bottom of which is stone. In this is at once put the fifth part of the old bags or nets, with a large quantity of water, and it is beaten for six days, after which it is

washed on a strainer. It is then beaten two days with a ley of soda, washed and dried. This beating with the ley of soda is done in all nine times, after each of which the pulp is washed and dried. In dry cold weather each subsequent beating occupies eight or ten days, in the hot season five or six days are sufficient. The paste, when thoroughly bleached, is formed into sheets as usual. All the sheets formed in one day are in the evening placed under a plank, on which two or three men sit for about an hour to squeeze out the water. It is then stuck on a wall, and falls off next morning when dry. It is then pasted on one side and dried, and then it is pasted on the other side and dried, rubbed with a stone, and cut square. All the paper-makers here also are Muhammedans. The Mohurahdars are persons, who smooth paper by rubbing it with polished glass, which obliterates entirely the marks of the frame, as is done by hot pressing, and gives the surface a glossy smoothness. This operation costs from eight to ten anas a ream, and the workmen must make very handsome wages.

Although many great idle fellows amuse themselves with paper kites, the makers cannot live the whole year by this profession, as few amuse themselves with this sport except in the cool season. The makers therefore retail toys for children, which are made by the potters, and the apparatus used in smoking tobacco. Their kites (*telanggi* or *guddi*) are not superior to those of Puraniya. Those who make fireworks are not superior to the Atushbaz usual in Bengal. The fireworks are chiefly employed at marriages. At other seasons the same people make gunpowder, of which a good deal is used. The natives seem to delight in the noise of fire-arms, and fire powder merely for pastime; but many people in these districts are constantly provided with arms and ammunition; as a defence against robbers, or rather from family habits, considering themselves as born soldiers. They do not however parade in arms, and few of them now appear in public with even swords.

Of four descriptions of tanners, two prepare the leather, while the two other kinds work up the material. The Kimokhtsaz prepare leather from the skins of horses and asses, and dispose of it to the shoe makers. It is only the skin of the hinder parts that is used. This is put four days in water, and then the hair is removed by scraping. Then the flesh

side of the skin is covered with the small millet called China, which is pressed into the skin, and forms numerous pits on its surface. It is then dried in the sun, and scraped, after which the hair-side is scraped five times. The skin is then dipt in water, after which the flesh-side is again scraped, and the leather is boiled in a solution of the salt called *Bherkhari*. The flesh-side is then covered with copper filings and sal ammoniac, and then with a layer of grass. Above this are laid eight or ten hides one above the other, and treated in the same manner. The whole is pressed by a weight. In eight days the skins are found of a fine green colour, and are fit for use. Each piece of skin, which makes the upper leathers of a pair of shoes, sells for five anas.

The Dabgars make leather bags for holding Ghiu (butter) oil, and thin extract of sugar cane; they also make targets of the hides of buffaloes, and glue. The bags are of two sizes, the larger made of the hides of buffaloes, the smaller of those of oxen; both of which are purchased from the butcher. Two buffaloes hides or six ox hides cost a rupee. The skins, without any preparation are soaked four days in water, and are then scraped with an iron instrument to remove the hair and impurities. While still moist they are cut into pieces so as to apply on a mould like a pot, made of unbaked clay, and of the shape and size of the intended bag. Each bag consists of two or three pieces, which are not sown together, but cohere, where they overlap. They are allowed to dry four days on the mould, which is then broken, and taken out. Three buffaloes' skins make four bags worth two rupees. The materials cost $1\frac{1}{2}$ r. The targets are two spans in diameter, and are made on a mould in the same manner as the bags. They consist of four folds of skin, and 15 targets require three hides worth $1\frac{1}{2}$ r. When taken from the mould the targets are varnished by applying 20 times, in the course of 45 days, a composition of two sers of Dhuna or the resin of the Shorea robusta, of one-half ser Kharwa, a fine resin which I believe is that of the Vateria Indica, and of three sers of linseed oil. Every time that the target has been covered with this varnish, it is dried, and rubbed with charcoal prepared from the reed called Katra. The varnish costs six anas, and in the state above-mentioned the 15 targets, the materials for which amount to $1\frac{14}{16}$ r. are sold to traders for

7½ rs. These dealers employ other workmen to paint the targets, or to apply brass or iron bosses, and then sell them for about one rupee each. At Patna and Danapur there are very good workmen, who make shoes after the European manner; and in all towns they make neat shoes and saddles for the use of natives, and they cover stools and baskets. The demand is considerable for shoes, the soles of which are of leather, but the upper part is of European woollen cloth embroidered with silk. Formerly the cloth was usually black with embroidery of bright colours, but of late white and yellow cloths have become fashionable. They sell at from 10 to 16 anas a pair. Shoes called Zuri, the upper parts of which are of fine broad cloth or velvet, embroidered and bespangled with gold and silver, sell at from 1 to 16 rs. a pair. The demand is very considerable, and large quantities are sent to Bengal. The makers are easy in their circumstances, and work chiefly by day wages for some traders, who supply all the materials. They get two or three anas a day for wages, and, except the Chamars lately employed, are all Muhammedans.

In every part of India, where the people were shod, they rather used slippers than shoes. They had no ears for tying or buckling them on the foot, and the heel was never worn up, although, for what reason I do not know, they were generally provided with heels. The common coarse shoes, however, used by those who labour or walk, are now very often worn with the heel up. This custom seems to have been first introduced among the native soldiers in the British service, and has been found so convenient, that labourers have usually adopted it. Men of rank and their attendants, however, continue to wear their shoes like slippers, for the purpose of throwing them off whenever they enter a room, which they still continue to do every where, except in the houses of Europeans, in which all natives of rank now imitate our example. Long points, like those used in Europe in the fifteenth century, have for some years been highly fashionable, and, I am told, were introduced from Lucknow, about 20 years ago.

Saddles are highly ornamented after the native fashion. The Knugirdoz make saddle-cloths, not quite so long as those used by the European knights of the fifteenth century, but

still very unwieldy, and loaded to an extraordinary degree with tassels, fringes, straps, and all manner of appendages.

Most of the tobacco is prepared for smoking by those who retail provisions, and some is prepared by the confectioners, and by those who sell paper kites.

I have not here been able to procure a full account of the ingredients that enter into all the intoxicating sweetmeats. The most usual are called Majun, from whence the preparers derive their name; but there are various other kinds, and the demand in Patna seems to be pretty considerable. Sugar, hemp leaves, and ghiu, are the chief ingredients in the Majun, which is made as follows:—Take five rupees weight of dried hemp leaves, and rub them well with an equal quantity of ghiu, or prepared butter. Boil these in 160 rs. weight of water, till one-half is evaporated. Strain this through a cloth, and squeeze the herb thoroughly. When cold, scum off the butter, which is impregnated with the qualities of the hemp, and add it to a syrup prepared from 80 s. w. of sugar. When cool, this syrup is made into tablets. These are eaten by the rich, in hot weather, to give them an appetite, and in cold weather to keep them warm. If too much is taken, the Majun produces intoxication.

The distillery of spirituous liquors is carried to a very great extent, entirely however for consumption on the spot. Each of the 483 shops has only one still, which does not differ from those of the districts hitherto surveyed, being always made of unglazed earthen ware. The materials used are the Mahuya flowers (*Bassia*) and thin extract of sugar-cane, generally mixed, but sometimes separate, according as one or other is cheapest. The different qualities of the liquors never enter into consideration, the only point being how to get as drunk as requisite at the smallest possible expense. In Bhagalpur I have dwelt sufficiently on the process, which is quite the same, whether the flowers or the extract are used. The larger stills, requiring a considerable capital, belong usually to a number of partners, who seldom do any other work than to retail the liquor; the profits therefore must be very considerable. The calculation of the monthly expense and profit of a still at Gaya, daily paying 7 rs. to Government as duty, and distilling, 15 or 16 times, 30 sers (72 s. w.), or 55½ lbs. of Mahuya flowers, is as follows:—

To flowers, 232 rs. 8 anas; to firewood, 11 rs. 4 anas; to pots, 9 rs. 6 anas; to duty, 210 rs.; to three servants, 6 rs.; total, 469 rs. 2 anas. By 15¼ *mans* (each 77½ lbs.) of liquor daily, at 18 anas a *man*, 523 rs. 2 anas; profit, 52 rs.

Four persons are concerned, each making 13 rs. a month. In this country 13 rs. a month is a very comfortable subsistence for a large family; but still, considering the responsibility to Government of 7 rs. a day, and the capital of 70 or 80 rs. required, the profits seem too small, and have probably been somewhat underrated, as might be naturally expected.

Those who distil perfumes use a copper still, which may hold from 150 to 200 lbs. of water, and has a flat head. A tube, bent at right angles, conveys the vapours into a copper cucurbit, which serves as a recipient, and is placed in a wide-mouthed earthen vessel to contain water for condensing the vapour. The whole apparatus, and the place where it stands, are exceedingly slovenly. The artists make three kinds of water, from roses, from the Pandanus (*Keara*), and from the lime (*Citrus*); but the quantity of the two latter is very trifling. The rose water is either single or double-distilled, the latter being drawn a second time from fresh roses. These flowers are only used when fresh gathered. Even in three hours they are supposed to lose their perfume. The single-distilled rose water sells, by wholesale, at from 12 to 13 rs., and, by retail, at from 16 to 20 rs. the *man*, which weighs about 76 lbs. Each distillation, according to some, for a *man* of water requires 22,000 roses, and about 56 sers of water, of which 40 only are drawn off. The double-distilled rose water retails at 2 rs. a ser ($1\frac{9}{10}$ lb.), and being only in demand among Europeans, is not made, except when commissioned. Others allege that all is distilled twice, as such alone will keep, and that what is required for common use is diluted with water, when wanted. The other waters are distilled in the same manner. All their essences consist of sandal-wood oil, impregnated with various smells, for imbibing which this oil has a strong capacity. The best workmen distil their own sandal oil, but some is imported. The sandal wood comes from Malabar. It is rasped, soaked three days in a little water, and put in the still with water, and the oil is found floating on the surface of the water in the recipient. It is distilled to dryness. Sandal oil alone is not used as a

perfume, but is impregnated with many odours by placing it in the recipient, and distilling over into this the waters from various substances, such as roses, the flowers of the Bel (*Jaminum sambac W.*), spices, the roots of the Andropogon called Kus, the flower of the Chameli (*Jasminum grandiflorum*), that of the Mulsari (*Mimusops Elengi*), Agar wood (*Agallochum*), the flower of the Keara (*Pandanus*), the flower called Juhi (*Jasminum*), and even clay. The most common by far is the rose, and what is in almost universal use among the natives of India, as atur of roses, is sandal-wood oil impregnated in this manner, which, according to its quality, sells at from 1 to 2 rs. for a rupee weight, while the real essential oil of roses costs 50 rs. at Patna. The sandal oil seems to extract the whole perfume from the rose water, as this passes into the recipient. A common essence used is one impregnated with the odour of spices, and called Mujmua. The ingredients vary from 5 to 50; but cloves, nutmegs, mace, greater and lesser cardamoms, and saffron, are the usual ingredients. It sells for from 1 to 3 rs. for a rupee weight (three drams apothecaries weight); but it is not at all agreeable. By the skill of European artists the essences might perhaps be rendered useful ingredients in perfumes, as they preserve the smell of various very agreeable odorous substances, which could not be readily procured in Europe, especially that of the Pandanus flower. The most strange of these essences is that made with the clay, which communicates to oil of sandal-wood the smell, which dry clay emits, when first wetted, and which to me is far from agreeable. It sells at 1½ rupee for each rupee weight. The best sandal oil costs here about half a rupee for the rupee weight.

The workmen of Bar, instead of a distilled oil, impregnate an expressed oil with the odour of the Chambeli flower (*Jasminum grandiflorum W.*). At the beginning of the flowering season they take 82 sers (about 169 lbs.) of the seed of Sesamum (*Til*), and every fair day during the season add to one-half of it as many flowers as they can collect, which may be from one-fortieth to one-fourth of its weight; next day these old flowers are picked out, and put to the other half of the seed. The season lasts about three months, and the whole quantity of flowers may in that time equal the whole weight of seed; but one-half of the seed is impreg-

nated entirely with the fresh flowers, while those given to the other half are withered, and have lost part of their strength. The seed is then squeezed in a common oil mill, and each gives 12 sers, or about 24 lbs. of oil; that impregnated by the fresh flowers being of twice as much value as what is impregnated with the withered. I am told that the 12 sers of the best kind are mixed with 96 sers of common oil of sesamum, and the mixture here sells at half a rupee for the ser, so that it brings 54 rs. The people who make it valued it at 12 rs., and thus made it appear that they lost by the manufacture; but they live easily, and do no other work than to pick the flowers from among the seed, and mix and retail the oil. The inferior oil at the same rate will bring 27 rs., and the total value will be 81 rs. The real charges are 82 sers of sesamum seed, at 25 sers a rupee=3 r. 5 a. 9 p.; 44 sers of oil of sesamum, 15 r. 12 a.; 2 *mans* of flowers, 12 r.; expressing the oil, 8 a.; total, 19 r. 9 a. 9 p.; profit, 61 r. 6 a. 3 p. Those who express oil from various seeds (*Teli*) use the same mill exactly that is used in the districts hitherto surveyed; but on the whole they are rather richer than those of the greater part of Ronggopur, Puraniya, and Bhagalpur, although they are not so wealthy as those near the Nagor river, in Dinajpur and Puraniya. At least three-fourths of the whole have stock enough to enable them to purchase the seed and to sell the oil; and not above one-fourth express the oil for hire. Farther, one-half of the whole are not only able to purchase the seed which they squeeze, but have also some good carriage oxen, with which they trade in other grain; the oil-cake giving them a facility in feeding the cattle. All the mills are turned by cattle, and some few have two, that work by turns. About towns some have more than one mill. The rate of hire does not differ materially from that in the districts hitherto surveyed. The profit admitted at Gaya by those who purchase the seed and sell the oil is as follows. Each mill grinds three times a day, and at each time receives 3 sers, or (72 s. w.) 5⅓ lbs. of mustard seed. At each time the owner gets ¼⅜ parts of the weight of the seed in oil, and ¼ ana worth of cake.

Produce of oil, 6 anas; produce of cake, ¾ ana; total, 6¾ anas. Expense of seed, 4½ anas. Profit, 2¼ anas.

From two manners of extracting the butter and curdling

the milk the Dahiyars are here divided into two classes, Guriyas and Majrotis, the one never operating after the manner of the other. The Guriyas make the butter first, by churning the milk as it comes from the cow; for in this country, except by exposing it in porous pans to the air during the coldest weather, the cream does not separate from milk, and this separation is not attempted by the natives, who do not know what cream is. The milk that thus remains, after the separation of the butter, is curdled by the Guriyas, and is called Mahuya-dahi. The Majrotis on the contrary begin by curdling the milk, and thus make Mitha-Dahi, and it is by churning this substance that they procure butter. Almost the whole buffalo milk in these districts is managed by the former process.

There are two descriptions of persons who live by parching grain. The Khasiyawalehs boil pease, season them with turmeric and capsicum, and then parch them. The Kungjtilayis parch seed of sesamum, janera, and rice, which they mix with extract of sugar-cane, and form into balls. Both retail their commodities in the streets. The bread, which the bakers make after the European fashion, is most excellent.

The Kussabs kill the sacred animal, and at Dunapur, in the hot season, some natives sell tolerable veal, killing once or twice a week. In the cold season they kill beef. An European at the same place sells all sorts of animal food of an excellent quality; but it is only during the cold season, when he can salt what is not disposed of, that he can afford to give beef, or any considerable variety.

The Bawarchis, or cooks, who adhere to the Hindustani fashion, dress as usual by the hundred weight, and are all Moslems of pure hands; but many of the cooks belonging to Bakipur are people of the very lowest dregs of abomination, who have taken upon themselves to cook for Europeans. The Khandiyars of Patna work in buffalo horn and ivory. Of the former they make hair combs, cups, handles of knives, and some other trifling articles; with the ivory they inlay boxes. They can both turn and carve. The Kangghai make wooden hair combs. The turners (*kharadi*) of Patna work in wood, and make chiefly cups for drinking and keeping oil, small boxes, and play-things for children, some of which are exported. These wares are painted.

There are, in the country parts especially, a good many who unite the professions of carpenter and blacksmith, but who make chiefly the implements of agriculture. The carpenter and blacksmith who make these, whether the same person performs the same offices, or two men are employed, usually belong to the manorial establishment, and the payment for the implements of agriculture arises from a share of the crop.

The Lohars, who work in iron alone, everywhere make the implements of agriculture, and coarse cutlery; nor in these districts are there any such fine workmen as those of Mungger. At Patna they make vessels for boiling sugar and sweetmeats, the drums called *nakarah*, nails, locks, and chest hinges, for the doors of the natives turn on pivots; and they work almost entirely for native consumption. In towns men make 4 anas a day, in the country about half as much. Some few live entirely by making cages for birds, which are tolerably neat, and are composed of iron wire. The shoeing horses here, as everywhere else in India, is a separate profession. The shoe and nails are made by the blacksmith, but the Nalbund fixes them on. These farriers do not attempt to treat the diseases of horses, nor have I heard of any pretenders to the veterinary art.

Some people (*tirgurs*) still follow the profession of making arrows, which are not yet entirely exploded in Indian warfare, especially among the rude tribes of mountaineers that inhabit the wilds south from Gaya. The tirgurs purchase the heads from the blacksmith, 400 costing 1 r. They collect the reeds, which are of the kind called *sar*, and the feathers, and fit the whole. For 100 arrows they charge from 2 to 2½ rs. The Kaseras deal entirely in making or repairing vessels of copper, brass, and bell-metal. The workmen of Daudnagar gave me the following estimate of their brass and bell-metal wares:—40 sers (44 s. w.), or 45 lbs. of brass, require 27½ sers of copper, value 20 rs.; 22 sers zinc *(justah)*, value 16 rs., and charcoal to the value of 8 anas; and, after being cast, the brass requires a man to beat it, whose hire is 1 r. The vessels are worth 46½ rs., leaving a profit of 9 rs. The chief man does nothing but melt the materials, form the moulds, and cast; and seldom makes more than 40 sers in one month. The beating requires by far the most dexterity, but

the man who does it is usually hired and paid by the job. A *man* of bell-metal vessels worth 42 rs. requires 38½ sers of copper worth 28 rs., 9½ sers of tin worth 5 rs., and charcoal worth 8 anas. The beater receives 1¼ r., leaving a profit of 7¼ rs., and one man seldom attempts to cast more than one *man* in a month; but in some houses there are two casters. In Patna a few of them have capitals that would enable them to work to a larger extent; but they lay it out chiefly in purchasing vessels of the kind made at Kangtoya between Calcutta and Moorshedabad, which the people here cannot imitate, and few or no houses cast more than two *mans* a month. At Gaya their profits are at least equal to those at Patna and Daudnagar, and a man whose family consisted of seven persons, and who might therefore have two casters, said that his daily expenses came to 9 anas, which is 16½ rs. a month. The goods made here are chiefly plates, cans without handles (*lota*) for holding water, and shallow pots, without ears, handles, or cover (*tasla*), for cooking.

Those who make tin leaf have some little capital, and their work is sent not only to all the places in the vicinity of Patna, but to Calcutta and Moorshedabad. They not only beat the tin leaf; but paint a great deal on one side with three bright colours, red, green, and yellow. The first colour is given with lac, the next with verdigris, and the yellow with turmeric.

Gold and silversmiths are called *sonar*, and the sonar forms a regular part of the manorial establishment, whose office is hereditary, and who weighs the crops when a division takes place between the landlord and tenant, or when either of these sell to the merchant. By orders of the police the goldsmiths always work at home; but are watched by their employers to see that they do not adulterate the metals. The price for working silver is from one-sixteenth to one-fourth of the metal, according to the nature of the work; for working gold the price is from one-fourth to one rupee of silver for every rupee's weight of gold.

The Minamorussa give various ornamental colours to the precious metals. A great many of the gold and silversmiths cannot give their work any polish, but one man in Patna, called a *sonkari*, lives by polishing their coarse work; and two other houses, called *jelagurs*, live by polishing a kind of

bracelet worn round the thick part of the arm, which is called *basu*, is very much in fashion, and is always polished. In Patna the making of gold and silver wire gives employment to three sets of workmen, and a considerable quantity is exported, besides a good deal that is required on the spot. The workmen have no capital, except their implements. Merchants furnish the materials, and pay them by the quantity of work. Although they are acquainted with the art of gilding silver wire, as practised in Europe; yet very little such is made, silver lace being chiefly in demand. The Tarkush form the precious metal into coarse wire, having previously gilded the ingot, if that is required. The Taniya draws the wire to the requisite fineness, and the Chapriyas flatten it, in which state it is called *badla*, is used either for forming lace or for weaving as an ornament into cloth, or for making cloth of gold or silver. The people who flatten the wire use the hammer with considerable dexterity, one blow never failing to render it of the proper thinness. These workmen make from 2 to 4 anas a day. The Tarkush of Bar make Badla of copper gilt or silvered, and go through the whole process.

The Tubukgur beat gold and silver leaf. They use deer skin, and preserve their leaf in paper books as in Europe. Some of them have capitals, purchase the material, and beat on their own account. Others work for merchants. They pretend that a great variety of herbs are requisite in their operations, but this is no doubt destitute of foundation; indeed, most of the workmen in Patna make a mystery of their art.

The Hukkah-Nugini, or jewellers, polish stones; but here they are seldom, if ever, employed on any material superior to rock crystal or pebbles, and those of Patna are much employed in polishing the bits of glass which the Minamorussas make into false jewels. The same workmen of Patna are a good deal employed in polishing the pebbles of the Son river for Europeans, as these stones are in little or no request among the natives. One house, however, at Gaya makes rings of this material, which are sold chiefly to pilgrims. The jewellers rub down and polish the stones on a wheel made of lac, and powdered corundum, and work very well. From Europeans they get 4 anas a day, and furnish their wheel. The jewellers of Behar and its vicinity work in rock-crystal

(phatik) alone. The crystal, which they procure in the hills, and which has been described in the account of the natural productions, is seldom of a size to make anything larger than beads like large peas, which are but very indifferently rounded or polished, although the workmen show very considerable dexterity in cutting them. They stick one end of the steel spindle into the ground, and place the crystal on the other end, which is very sharp, and then with a small hammer strike off all angles, a work which they do with great rapidity, and which requires as much dexterity as the formation of gun-flints. A hole is then made through the bead with a common drill turned by a bow-string. The polish is said to be given by the long-continued agitation of a quantity of beads, thus formed, in a leather bag; but this part of the operation I did not see. A man usually makes 1,000 beads a month, which are worth from 8 to 10 rs., and the crystal may cost one-fourth part of this money, so that he has very good wages. The beads are chiefly purchased by the pilgrims of the Jain religion. When a large piece of crystal is found, it is made into a Lingga, and a few of these are made at Patna of crystal imported from the west, which is of a very good quality. It is bankers alone that deal in real jewels or pearls, and these are not cut here.

The Sungturash, or stone-cutters of Patna, are employed in completing mill-stones, the stones used for rubbing curry stuff, and for weights, all of which are brought in a rough state from Chandalgar (Chunar R.) and Rautas. They also import some plates from Mungger, to which they give a much higher polish than the workmen there can do. Those of Sahebgunj and Holasgunj have already been mentioned as architects and statuaries; but as they have no employment in these higher arts, they have been reduced to make plates and cups from the sung-musa, or stone of Moses, a very fine potstone, of which I have given an account in treating of the natural productions. The part of this colony from Jaynagar which has settled in Holasgunj, superintends the quarry and gives the vessels the first rude form. Those at Gaya turn them in the lathe, and give them a good polish. They are sold chiefly to the pilgrims from Bengal, where they are in great request, and are the handsomest vessels of the kind that I have seen, although they are quite plain. Each family

may clear 7 or 8 rs. a month. In the decay to which the want of employment has reduced architects and masons, a family, which remains at Behar, has betaken itself to pare the hoofs of horses; for the horses there are not shod with iron.

The art of pottery is much on the same footing as in the district of Bhagalpur; that is, the potters make in general a very coarse unglazed ware, but owing to the quality of the clay most of it is strong. A few make Sorahis for cooling water, such as I have described as being made at Mungger, and they also make a wider mouthed vessel called Jagar, which cools water. Tiles for the roofs of houses are a considerable part of the potter's work. They are of two shapes. One flat with both sides turned up, the other formed by cutting a hollow cylinder longitudinally, and thus making two tiles. Each tile in the lowest row of a roof has on its under side a knob, by which it is prevented from falling, but the others beneath are quite smooth, and are supported by those of the lower row, owing to which they are very easily displaced, and the roofs are generally leaky. The flat ones, if good, sell at Patna for two rupees a thousand, and cannot be used alone. They are laid in rows with their turned up edges parallel to each other, and these edges are covered by rows of the smaller semi-cylindric kind, inverted over them. The semi-cylindric kind sell at Patna, if good, for half a rupee a thousand. They may be used alone, by first covering the roof with them placed on their convex sides, and then placing over these another layer disposed in a contrary position. The very light potters' ware, mentioned by Buffon, as made at Patna, is no longer known there, and I presume has merely been purchased at that city, and has come from some other part of India. Some such I have seen at Bombay; but it had been brought from Bussorah. In the account of the natural productions, I have mentioned the attempts of Mr. Law to make porcelain of a calcareous marl; but, as might have been expected, the manufacture was immediately abandoned. At Bar some potters make vessels for the use of the Muhammedans, that have a kind of enamel, and may be kept clean by washing. They put the ware three times on the wheel. At the first it is formed, at the second it is smoothed, and at the third it is carved. It is then carved with a pig-

ment made of Kharimati (porcelain clay), Sajimati (impure carbonate of soda) and oil cake in equal quantities, mixed with a sufficient quantity of water. When dried, from five to seven vessels are put into a large unglazed earthen pot, (*Matka*) the mouth of which is covered with a plate and luted; four or five of these pots are placed in the ordinary kiln, and burnt as usual. The enamel is of the most beauful white, but the work is very coarse.

Many potters in the country make rude playthings for children; but in some towns there are people who make these chiefly, and do not deal in common pots; but besides the toys they make the implements used in smoking, and the finer bottles and vessels used for cooling water. The toys are often painted with gaudy colours, especially white, which is done with mica (*Abarak*) or porcelain clay (*Khari*).

At the principal towns are some persons who deal to a considerable extent in making bricks, contracting to supply all that is wanted for any building. They are called Puzayahs, and take no share in the manufacture farther than to employ the workmen, to advance money, and to procure the ground for clay. For this they pay an annual rent to the owner. People of a certain class form the bricks, and at Patna and Sahebgunj at least use the moulds; and it is these alone that have been entered in the tables as brickmakers. At Sahebgunj the bricks are 9 inches long, 5 broad, and about 2 thick. Before going into the kiln they cost 28 rupees for the lac (1,00,000). Workmen of another class burn the bricks, and collect fuel, for which they not only use wood, and the thick stems of various crops, but also cow dung and every kind of excrement. These people contract to deliver the 1,00,000 burnt bricks at 125 rupees, and pay those who mould them. In works, that have been done by the Company the dealers (Puzayahs), on account of an extensive sale, and prompt payment, have been contented with 156 rupees for the 1,00,000 bricks, but take somewhat more from common employers. At Patna the Puzayahs find fuel, and employ servants to burn the bricks; but buy them ready for the kiln from those who mould the clay.

The bricklayers are far from being good workmen. Their plaster in particular is badly compounded, and quite new houses often leak with the first shower. Common workmen

are allowed from three to four rupees a month; principal artists often receive double.

Lime is generally prepared by people who deal to some little extent, and who employ labourers to collect and burn the materials, which are both shells and calcareous nodules. At Patna the former are chiefly employed, and are brought from the north side of the Ganges. A few of the dealers there have considerable capitals (2 or 3000 rupees), and import some lime from Rautasgar. At Behar, those who burn lime, purchase the raw material from persons who collect it. A kiln requires 14 *mans* (about 1150 lbs.) of calcareous nodules, which cost 1 rupee, and 3 *mans* of charcoal, which cost as much. In three days the lime is burned, and is powdered in wooden mortars, while unslaked. The lime procured in this state is 8 *mans* (about 660 lbs.) worth 2¾ rupees. The people who burn it are the soap makers; and I have already stated, that much reliance cannot be placed on their accounts of profit and loss.

The manufacture of Thread, Cloth, Tape, Strings, &c.—Cotton as usual is by far the most common material used in the cloth manufacture of these districts; and a great part of what is used is the produce of the country. Of this a great deal is freed from the seed by the women who spin it, and a part of this is also beaten by the same persons; but the Dhuniyas, who make a profession of cleaning and beating cottons, separate the seed from some, and beat the greater part. Perhaps one-third of them have stock enough to enable them to buy a little cotton, which they clean, and then retail. The remainder works entirely for hire. A man and his wife can make from 3 to 4 rupees a month. In country places they are very often paid in grain. At Arwal they are allowed 1½ sers of grain for beating 1 ser of cotton, and in one day a man beats 4 sers (45 s. w.) equal to about 4½ lbs. and of course receives 6¾ lbs. of grain. Those who have a little capital, may make 4 or 5 rupees a month.

In every division I procured an estimate of the proportion of women who spin cotton, of the average quantity of cotton that each spins, and of the value of the thread. Such estimates are liable to numerous objections; but it is probable, when a number of them are taken, that the errors of the one will be nearly corrected by those of the others, so that the

average will not be far from the truth. Allowing that the women of an age fit to spin are one-fifth of the population, the estimates, that I procured, will give for the whole thus employed 3,30,426 spinners. Now by far the greater part of these spin only a few hours in the afternoon, and upon the average estimate, the whole value of the thread that each spins in a year, is worth nearly 7 rs. 2 anas, 8 pice, giving for the total annual value 23,67,277 rs. and by a similar average calculation the raw material, at the retail price, will amount to 12,86,272 rs. leaving a profit of 10,81,005 rs. for the spinners, or 3¼ rs. for each. But there are many women who spin assiduously, and who have no interruptions from children or family, and these make much more, especially where the thread is fine; there being no sort of comparison between the reward allowed for such, and that given to those who spin coarse thread. As the demand therefore for fine goods has for some years been constantly diminishing, the women have suffered very much. Another calculation agrees so well with the above, that I have little doubt of the general accuracy of both. An estimate was made in each division of the number of looms employed, of the quantity and value of thread required annually for each, if employed in working at the usual rate, and the most common kind of goods, and the following is the result.

Cotton thread required for cotton cloths, 22,29,979 rs.; do. for mixed cloths, 1,01,762 rs ; do. for tape and carpets, tent ropes, &c. 37,125 rs.; do. for sewing thread, &c. 2,000 rs.—Total 23,70,866 rs.

Some thread is both exported and imported. Taking the amount at the statements which I received, the excess of that imported will be worth 30,500, which would reduce the demand on the thread of this district to about 23,40,356 rs. in place of 23,67,277 which I have allowed to be spun; but at Bhagalpur it was said, that 1450 rs. worth of thread was there imported from Patna, and at Puraniya there is imported to the value of 12,200 rs. of which a half probably comes from the same town, while the merchants here only allowed an export of 3,420 rs. This difference, however, is of no great importance, and the results of the two calculations agreeing within one-eighty-seventh part form a coincidence as near as can be possibly expected. It must not however be denied, that these results were contradicted by another state-

ment, founded on the quantity of raw material said to be used. The cotton said to be produced in the country is only valued at 1,75,000 rs. but this is the harvest wholesale price, and the retail price will probably be 30 per cent. higher, giving in all 2,27,500 rs. The cotton merchants of Patna state their imports from 10 to 12,000 *mans*, but 1000 must be allowed to be used in stuffing mattresses and quilts, leaving about 10,000 *mans* for thread, and at the retail price these are worth 1,60,000 rs. giving thus 3,87,500 rs. of raw material, in place of 12,86,272. As the quantity required for thread seems in no manner exaggerated, and as the quantity of cotton produced in the country has probably been stated with tolerable accuracy, I must infer, that no dependence is to be placed on the reports of the merchants concerning the extent of their trade, of which indeed we shall find sufficient evidence, when we come to treat of the exports and imports. I am informed by Mr. Vansitart, the custom master, that when town duties were formerly levied on cotton, the quantity usually imported in one year was valued at about 3,50,000 rs. and the valuation having been at 10 rs. a *man*, this gives 35,000 *mans*, in place of 11,000. In this case there would remain for spinning 34,000 *mans*, which at the retail price would give 5,44,000, making the cost of the whole raw material 8,71,500 rs. The whole thread is spun on the small wheel common in India, and the implements for cleaning and beating the cotton are not different from those that are usual. No rank here is considered as degraded by spinning.

The dyers in these districts are divided into four kinds, Rungrez, Nilgur, Ach furosh, and Galalsaz. The first dye various colours, the second dye with indigo alone, the third with the root of the Morinda alone, and the fourth with *lac* alone; but some of the first class use both indigo and morinda. I have procured nothing new concerning the processes that are used by these artists, and shall confine myself to mention what the Golalsaz say concerning the manner in which they extract the dye from lac, a subject of considerable importance, as a vast saving of freight may be had by exporting the dye thus prepared, and the shell lac, when both are separated from the sticks, to which the lac naturally adheres. A good deal of the dye thus prepared is sent to

Calcutta, but owing to the purchasers being natives, it is not of the best quality; for the native merchants almost univer-yersally run upon whatever is cheapest. The dye thus prepared is called Golal. To make the best kind, take 40 sers (80 s. w.) or 82lbs. of stick lac, (value 12 rs.) beat it in a mortar, and put it into 36 sers of water for three-quarters of an hour; then, for an equal length of time, tread with the feet the lac and water, and pour off the water or infusion. Then the lac is put into an equal quantity of water and treated in the same manner, and this is repeated a third and a fourth time; the whole infusion is then boiled to two-thirds, and then are added 20 sers of sour curdled milk, (value eight anas); the whole is then put gradually into a cotton cloth bag and strained. This takes two days, after which the bag and what remains in it, are squeezed with a heavy weight and made into lumps about the size of a filbert, which amount to 1¼ ser, worth 3¼ rs. The lac is then melted and cast into little cakes, of which there are 20 sers, worth 10 rs. Total produce, 13 rs. 12 anas; the materials are 12 rs. 8 anas, and fire-wood costs 4 anas, leaving 1 rupee for profit. For the Golal of an inferior quality usually sent to Calcutta, 5 sers of Tikhur or starch, prepared as already mentioned, value 1 rupee, are added along with the milk, and 6 sers of the Golal are procured, worth 5¾ rs. The best, in fact, is only made when required for dying silk on the spot. The Rungrez are employed much as in Bhagalpur, and make good wages. At Gaya, a family in which there were two adult men, and in all eight persons, cleared, I was told, 120 rs. a year. The indigo dyers are paid by the weight, and give a full blue colour to 5 sers (9¾ lbs.) of cotton thread for a rupee.

The weavers, who make cloth wholly or in part of Tasar, silk, are confined to three vicinities, Phatuha, Gaya and Nawada. At the first are made four qualities of goods: 1. Banusa 18 cubits long by 2¼ cubits wide, and consisting of Tasar and cotton warp in stripes, with cotton woof. This cloth is used for women's petticoats. The piece sells for about one rupee. 2. Maghaiyas 10 cubits long by 1¼ cubit wide, value usually 12 anas. It differs from the Banusa only in size, and is used by women for a wrapper. 3. Lunggi serves both as wrappers and petticoats for women, and is

13 cubits long by 1$\frac{5}{8}$ cubits wide. The whole warp is Tasar, the woof is partly Tasar, partly cotton; the piece usually sells for 13 anas. 4. Sela, entirely of Tasar, is made of the same size with the Lunggi, and both serve the same purposes. The piece usually sells at 2$\frac{1}{4}$ rs.

At Gaya they make some Selas, but the great article is the Manpuridhuti, which is in great request with the Mahratta pilgrims, who purchase almost the whole. A piece sells for 2$\frac{1}{2}$ rs., is 18 cubits long by 2$\frac{1}{7}$ wide, and consists of cotton with Tasar silk borders.

At Nawada, the cloth made is called simply Dhuti, and is of the same nature with the Manpuridhuti; but the pieces are worth only 9 anas each, being 8 cubits by 2. On making an estimate of the number of looms and number of pieces wrought, I find the following result:

	Cocoons, value.	Cotton thread, ditto.	Value of Cloth.	Total Profit.	Do. each Loom.		
					R.	A.	P.
Phatuha	1,81,758	76,100	3,71,250	1,13,392	90	13	0
Gaya	5,625	18,750	37,500	13,325	52	8	0
Nawada	2,016	6,912	12,960	4,032	33	9	7
Total	1,89,399	1,01,762	4,21,710	1,30,749			

Each loom requires one man and woman, the latter to wind, and to assist in warping and dying. At Phatuha about 50 old women are employed to wind and sell the silk thread, called there Tasar, while the cocoons are called Koya. A woman in one month can wind 8$\frac{1}{2}$ pons, or 688 cocoons, value 3$\frac{1}{4}$ rs.; each pon gives about 1$\frac{1}{4}$ Chhatak (76 s. w. a ser), therefore 8$\frac{1}{2}$ pons will give s. w. 50 $\frac{47}{100}$; but 12 s. w. of the Tasar sells for 1 rupee, therefore the s. w. 50$\frac{47}{100}$ are worth 4 rs. 3$\frac{1}{3}$ anas, leaving a profit to the spinner of 7$\frac{1}{3}$ anas. At the above rate a pound avoirdupois of Tasar silk would cost nearly 3$\frac{1}{4}$ rs., the material at present being dear. The operation of winding is performed in the same manner as at Bhagalpur, only no potash is used, which, although it no doubt facilitates the operation, may spoil the texture of the silk.

The cotton weavers are numerous; those of Phatuha are employed in weaving cotton diaper (Khes), which the natives use as a dress; but the great demand is for Europeans, who use this manufacture for table linen. The table-cloths (Chad-

dur) are made of four dimensions: first, 20 by $4\frac{1}{2}$ cubits, common value 10 rs.; second, 9 by $4\frac{1}{2}$ cubits, common value 3 rs. 8 anas to 8 rs.; third, $4\frac{1}{2}$ by $4\frac{1}{2}$ cubits, common value 3 rs.; fourth, $4\frac{1}{2}$ by 4 cubits, common value 1 rupee, 3 anas; towels $1\frac{3}{7}$ by $1\frac{3}{7}$, common value by score 2 rs. 8 anas. The total number of looms employed in this manufacture is stated to be 750, and in the statements which I received, it is supposed that each makes cloth to the value of 60 rs. a month. The whole annual value of this manufacture is therefore about 5,40,000 rs., of which the thread costs 4,58,600 rs.; so that each loom has a profit of $108\frac{1}{2}$ rs. a year, but three persons are employed, the Lungri pulls the threads to form the pattern, the Dobarah twists the thread, and the Binkarai weaves.

By far the greater part of the other cotton weavers is employed in making coarse cloths for country use, but a good many work at finer goods for exportation, the Company having [had] three factories dependent on Patna, and five subordinate to the other three, while native traders have established 22 houses for the purchase of cloth. As the greater part of the cloth made in every division is coarse, and as my estimate is founded on the kind of which the greatest quantity is made in each division, it is principally applicable to the coarser goods. According to the statements I thus received, the amount of thread required is 17,71,379 rs., and the value of the cloth 24,38,621 rs., leaving a profit of 6,67,242 rs. or $28\frac{1}{4}$ rs. for each loom. It may be supposed that the fine qualities of goods taken for exportation would diminish the value of raw material, and increase the total value of the commodity; but that would not appear to be the case. Although the quantity of thread is no doubt less, yet, as the reward for spinning fine is much higher than that for spinning the coarse, the actual value is perhaps a little higher than I have stated, and may reduce the annual profit to 28 rs. a year for each loom. Further, it would appear, that the system of advances, and a good deal of the fine cloth is made on advance, produces its usual consequences; and the workmen, becoming indolent, do not make to a greater value than they do when working at coarse goods for ready money sale. In order to explain these matters, I have given four estimates in the Appendix explanatory of this manufacture; one of which is made up from the report of the weavers, founded

on the species of goods most commonly made in each division; the other three are from the report of the Company's native agents, men in general very intelligent and well-informed, and, I believe, that the report with which they furnished me was made up by Mr. Brown, lately commercial agent at Patna, a gentleman upon whose accuracy much reliance may be placed. Previous to his time a gentleman, whom the natives call Belver (probably Barber), had entered into engagements with 2,200 of the best weavers in the country round Jahanabad, including that division, Holasgunj, Sahebgunj, and a few perhaps in Vikram, Arwal, Daudnagar, and the corner of Ramgar, next to that town. Each man on becoming bound (Asami) to the Company received two rupees, and engaged not to work for any person until he had made as much as the Company required; and no other advance has ever been made by the commercial residents. The agent orders each man to make a certain number of pieces of such or such goods, and he is paid for each on its delivery, according to the price stated in the tables. This shows clearly that the system of advances is totally unnecessary; but it is here pursued by all the native dealers, as keeping the workmen in a state of dependence little better, if so good, as slavery.

The loom is of the imperfect structure usual in India, and where starch is used to facilitate the working, it is made from the root called Kandri, which is mentioned in my account of the natural productions of Bhagalpur. It must be observed that all Indian weavers who work for common sale, make the woof of one end of the cloth coarser than that of the other, and attempt to sell it to the unwary by the fine end, although every one almost who deals with them is perfectly aware of the circumstance, and although in the course of his life any weaver may not ever have an opportunity of gaining by this means. The same desire of illicit gain induces him almost universally to make the pieces somewhat shorter than the regular length. Stamp masters, such as superintend the linen manufacture in Scotland, would probably be found a check against these evils, which are quite the reverse of contributing to the real advantage of the weaver; but the power requisite to be vested in such persons could not, I doubt, be given to any persons to be found here

without producing greater abuses than those which stamp-masters could remedy.

The coarse goods made for market sale are always sold as they come from the loom, but that intended for sale is all bleached, of which I have already given an account, and much of it undergoes operations by different classes of tradesmen. It must be observed, that in these districts the weavers were bound to act as porters for conveying the goods of travellers; and when any person of rank or authority calls upon the Zemindar for such, the weavers are still required to perform this office. On some estates they are on this account allowed an exemption from ground rent for their houses; on others they are taxed at a higher than usual rate.

In most places the washermen smooth the bleached cloth with a beetle; but in Behar the people who perform this operation are of a distinct profession, work at no other, and are called Kundigars. At the same place a class of artists called Parchahkush, is employed to put all the threads in the bleached cloth at equal distances: the cloth made there being very thin, the operation of bleaching brings the threads into clusters, leaving many parts almost in holes. Three workmen place all the threads at equal distances with a wooden comb. In some other places a needle is used, and the workmen are called Nardiyas. Many fine pieces of cloth are ornamented at the ends with the flattened gold and silver wire called Badla, which, as the natives use the pieces entire, looks very showy. It is not woven into the cloth, but put in with a needle. The Badla made at Patna is too fine for the purpose, and is only used for making lace or thread for embroidery; and what is used in the cloths of Behar is probably only copper-gilt or silvered; some such is made at Bar. In each piece of the Tunzebs or muslins of Behar, the pieces of which are two cubits wide, the Kangnigars, who perform this operation, stitch from five to seven bands of this Badla, each consisting of 350 wires. The workmen receive four anas for the 100, and a man can daily put in from 50 to 70: allow that he puts in 60, and works 26 days a month, he will receive about 4 rs. ($3\frac{9}{16}$), and 3200 cubits of the wire costing 1 rupee, he has about $3\frac{7}{16}$ rs. a month for profit.

At Patna are a few women (Buta banwaiyas,) who flower

cloth in the same manner as is done at Maldeh, of which I have given an account when treating of Dinajpur. The Chhapagars put gold and silver flowers on fine muslin by a very simple process; they stamp the cloth in the form wished, with common glue, and then apply gold and silver leaf, which adheres to the glue, and rubs off where that has not been applied. Of course this cloth cannot be washed, but is very showy, and is used only on high occasions.

Except at Patna, most of the chintz makers work entirely for country use, as described in the districts hitherto surveyed, and the men here use a good deal, but women seldom appear in such a dress. The workmen of this kind have not regular employment, but make about 5 or 6 rs. a month. Two men can in one day print a piece of calico, for which they get a rupee; but the drugs cost one-half of the money. If the employment were constant, this would give each 7 or 8 rs. a month. The tradesmen of Patna make chintz for exportation, and use new cloth. Some of them have a little capital, find the materials and servants, and print the cloth at so much a piece for the merchants, who export it; but none can purchase the calico, print it, and stand the sale of the chintz. A great many, indeed, cannot find the apparatus, and work as mere servants to the merchant, who furnishes every thing. I did not learn their processes. Most of the chintz is exceedingly coarse, and is taken by the Portuguese and Americans; nor is the finest equal to what comes from Lucknow or the city of Calcutta, much less to what is made in Europe.

The Newargars weave cotton tape; I have nothing new to offer on this subject. Two houses at Sahebgunj knit mittens of cotton. The carpet weavers make three kinds of goods. One is the common Sutrunji, made entirely of cotton; and another consists of Sutrunjis, of which the warp is cotton and the woof woollen, but striped and worn in the same manner with those made entirely of cotton. The loom employed in weaving both these is horizontal, without either treadles or reed, and the warp is stretched out the whole length and breadth of the piece intended to be wrought. The woof is not thrown across with a shuttle, but is passed through by several workmen, who bring the threads close together with wooden combs in place of a reed. The narrowest piece re-

quires two men, and 8 or 10 are often employed at this awkward labour. The third kind resembles the Wilton carpets of England, and consists of a woollen pile wrought into cotton warp and woof: these carpets are very handsome, and the workmen put in the pile with great dexterity, and form the flowers very neatly without looking at a pattern. The warp is placed vertically, and the various coloured worsted hangs down from bobbins between the warp and the workmen. The woof is passed by the hand and driven home by the comb. The carpet makers of Daudnagar, originally from Delhi, are the most skilful, and seem to be in easy circumstances, and in one shop I found 16 men weaving, besides dyers and spinners. The carpets made for common sale are $4\frac{1}{2}$ cubits long and $2\frac{1}{2}$ broad, and are used by the natives for bedding, or for a seat. When large ones for covering the floors of rooms are wanted by Europeans, they must be commissioned. The small carpets sell usually on the spot at $1\frac{14}{16}$ rs.; each requires 1 ser of cotton thread = $4\frac{1}{2}$ anas, wool 4 sers = 1 rupee, dying 4 anas, this is done by the weavers, and it is spun by their women; two men finish two pieces in three days, or about 52 pieces a month, and these are worth $97\frac{1}{2}$ rs.: the materials and dying drugs will cost $79\frac{10}{16}$ rs., leaving a profit of $17\frac{14}{16}$ rs. for the work of two men and probably two women. At Patna the following estimate was given concerning the common cotton sitrinjes, usually of the same size with the small carpets; each requires one ser thread (76 s. w.) worth $10\frac{1}{2}$ anas, and dying $1\frac{1}{2}$ ana; the value is 18 anas, two men make one piece in two days, and each has only $1\frac{1}{2}$ ana a day profit.

All the blanket weavers, as in other districts are shepherds. The 50 houses in Daudnagar were said to make annually 3,000 blankets, and at this rate the whole in these districts would make only 38,840 more than which are used in the country; but everywhere in Bengal the blankets in use, are alleged to come from Patna. At that city however, no such thing is acknowledged, and 2,500 rs. worth of blankets are said to be annually imported, while only 7,050 rs. worth are exported. Another estimate procured at Jahanabad would give rather a greater return. A man weaving and a woman spinning can in four days make a blanket five cubits by three, and worth one rupee. Allow that they work 26 days in the

month, they will make 78 blankets a year, worth 78 rs. Each blanket requires 4½ sers (at 52 s. w.) or lb. six of wool, worth 12 anas, so that the man and woman earn only 19½ rs. a year; but every man has sheep, and the value of the wool goes towards his subsistence, the wethers sold probably pay every charge.

At the rate here stated, the numbers of weavers would make 43,992 blankets of the best quality worth an equal number of rupees; but as many smaller are made, and as the average value does not exceed 12 anas, we may suppose, that the actual number made may be about 58 or 59,000, and this would require much more than the wool, which the sheep estimated to be in these districts could produce; especially as some is used for carpets. The wool of all the sheep, young and old, is used intermixed.

The Tashbaf weave cloth of gold or silver; the latter is by far the most common. The warp is proper silk, the woof is the flattened wire called Badla. It is not figured. It is chiefly used by rich men for sashes, or mantles to throw round their children's shoulders. The pieces are from three to eight cubits long, and from one to two cubits wide, and sell from 5 to 30 rs. The Gotasaz make gold and silver lace of the same materials. It is mostly sent to Calcutta and Moorshedabad, where it is considered inferior to that from Europe, or even to that of Benares, but it is superior to that from China. It is of two kinds, Kenari which is from 1 to 3 inches wide, and Gota which is from one-eighth to seven-eighths of an inch broad. Some of the lace, which they make is of copper-gilt, or silvered by the workmen of Bar.

The Batwaiya or Kalabatu make gold and silver thread, twisting the flattened wire (*badla*) round silk. This is sent to Moorshedabad, Calcutta and Dhaka, and is used by embroiderers, and those who flower muslin. The Alakbands make little strings and tassels, that are ornamented with gold and silver, and often with pearls and jewels, and are usually hung to the handle of the daggers, which natives of rank wear in their girdle. Individuals carry these ornaments to different parts, but merchants do not export them on a large scale. The Patwars knit strings as usual in other districts, and make also fringes. They use not only the proper silk, but also that called Tasar, and even cotton. Those of

Patna are reckoned very good workmen. The Nakads wind and twist the silk to render it fit for the use of the Patwars, and the makers of cloth of gold and silver, of lace, and of gold and silver thread. The winding is rather difficult, as the hanks and clews of raw silk, as prepared by the natives, are exceedingly ill contrived; and no one, who is not expert, can take off one yard without breaking.

The Kangjar make ropes of the grasses called Sabe and Muj. They twist them by means of two cylinders turned by a string, first drawn one way and then the other, but the cylinders turn always in the same direction. This is a motion, although known in Europe, not much used there, and which at first sight appears very extraordinary. The Kangjars mentioned in the list have obtained a fixed residence; but the people of this profession are in general vagrants, and many such are constantly travelling through the country, at least in fair weather.

Of the manufacture of Sugar.—In every part of these districts several of the confectioners prepare the kind of coarse sugar called Shukkur, which in fact is entirely similar to the Muscavado sugar of Jamaica, and is prepared by putting some of the thin extract of sugar-cane into coarse sackcloth bags, and by putting a weight on these to squeeze out the molasses. According to the care with which the operation is performed, the Shukkur amounts to from one-half to twenty-five fortieths of the whole. At Behar, where the thin extract was worth 1¼ r. for 40 sers, or 82 lb. nearly, and where this quantity gave 25 sers of Shukkur, these were valued at 18¾ anas, and the 15 sers of molasses were valued at 5½ anas, so that for performing this trifling operation the workmen had a gain of 4¼ anas, and the Shukkur sells for about 2 rs. 8 anas an hundred weight.

At Behar there are 15 houses of the Mahuri tribe, where refined sugar is made by placing 25 sers of the Shukkur in a basket, and on the surface is laid some of the aquatic plants usually employed to refine sugar. In this district the *Valisneria spiralis* is not so common as in Bengal, but is always preferred, when it can be procured. When it cannot, the *Serpicula verticillata* of Dr. Roxburgh, and several *Potomogetons* are used. After standing three days, about 2½ sers of refined sugar are scraped from the surface, and more plants

are applied, and this is repeated, until the whole Shukkur has been exhausted. From the 25 sers of Shukkur, it is alleged, that on an average there are procured eight sers of this raw sugar worth 14 anas, and 17 sers of molasses worth six anas, so that the profit on the operation is 1¼ ana. It can only be performed in the heats of spring. It is alleged, that the whole of the raw sugar made by these 15 houses amounts to about 300 *mans*, and that the Shukkur sold, is worth 7,000 rs: At this rate the quantity of Shukkur will be 1,49,334½ sers, which will require rather more than 5,973 *mans* of extract worth 7,466¼ rs. and the profit will be about 1,585 rs.; and there will be also procured 2,240 *mans* of molasses worth about 2,053 rs. Farther the 32 *mans* of raw sugar worth 1,287½ rs. will require 1,500 *mans* of extract worth 1,875 rs. of which 1,200 *mans* will be molasses worth about 1,058½ rs. leaving a profit of 471 rs. The whole profit of the 15 houses being therefore 2,056 rs. each will have 137 rs. which seems to agree with appearances. Most of this sugar is consumed in the vicinity, and is purchased as made by petty traders, who dispose of it at the weekly markets, nor are any advances made either by these or to the farmers, who rear the cane.

Neither are any advances made by the sugar makers of Kelsa, who prepare their sugar (*Chini*), by boiling, who are more wealthy men than those of Behar, and whose works are called Kolsar or Godam, of which there are 20. They give me the following account of the manner in which they manage 10 *mans* (400 sers, or 821 lbs.) of extract, which is probably less inspissated, than that in the vicinity of Bar, as it gives only one-half of its quantity of Shukkur, and sells one-fifth cheaper; so that in order to form Shukkur, the extract is first squeezed in coarse bags of sackcloth, containing each about 40 lbs. It is afterwards squeezed into bags of strong cotton cloth, containing each about 30 lbs. Of the Shukkur 1 *man* (82 lbs.) is put into an earthen vessel, with about 41 lbs. of water, and boiled for about 24 minutes. About this time a froth has arisen on the surface, and then 4 lbs. of milk and 8 lbs. of water are gradually added, while the liquor continues to be boiled for three hours. It is then strained through a cotton cloth spread on a basket, and the strained liquor is called *Sira*, from whence perhaps our word sirup. The Sira is again boiled for about 24 minutes in small earthen vessels,

each containing from 4 to 6 lbs. The contents of the whole are emptied into a large earthen cooler called a *Nad*, which has in its bottom a hole, that is plugged with a bamboo. After the liquor has stood two or three days in the *Nad*, the bamboo is pulled up, and the treacle is allowed to flow for two days. The aquatic plants are then applied two fingers thick, and in two days there are cleaned about 6 lbs. of sugar, which are scraped off, and the plants again applied. Three *mans* (246 lbs.) of boiled liquor in one cooler give 1 *man* of sugar, and 2 *mans* of treacle, and require 30 days to be exhausted. The sugar forms into grains, that in this country are considered too large for sale. It is therefore reduced to a fine powder by putting it in a bag, on which a man treads with his feet. Each factory in a month may make about 100 *mans* of pot extract into sugar, and the expense and profits are said to be as follows:

To 100 (8234lbs.) *mans* of extract, 100 rs.; to ox hire for bringing it to the works, 2rs.; to earthen pots, 2 rs. 6 anas; to fuel (cow dung), 4 rs.; to two labourers, 4 rs.; to milk, 2 rs.; to aquatic plants, 2 rs.; to house rent, 2 rs.; to bags, 1 r.; to profit, 29 rs. 10 anas.—Total, 149 rs. By 50 *mans* molasses *(Chhoya)*, 27 rs.; by 30 *mans* (*Garuya*) treacle, 20 rs.; by 17 *mans* sugar, 102 rs.—Total, 149 rs.

They only work five months in the year; so that each house will gain 148 rs.; but they also make a good deal of Shukkur, although the exact quantity I do not know, and they make a small quantity of a coarse sugar called *Bura*, the process for which I did not learn. Their gain however, is not less than 160 rs. a year. The sugar is considered as somewhat inferior to that made in Dinapur. It is not adequate to the consumption of these districts.

Of the saline substances manufactured here, the most important by far is nitre. In the account of the natural productions, I have mentioned the circumstances under which the saline earth is found; and the mixture of muriate of soda and nitrate of potash, which usually prevails in the saline matter, that nature prepares, has given rise to an idea, that the same brine can be converted either into the former, or into the latter according to the manner in which it is boiled. The workmen pretend, that, according as they please, they will from the saline earth as scraped in the villages make either nitre alone, culinary salt alone, or both. With regard to the two former there is little difficulty, because by the taste they can ascer-

tain what saline efflorescence contains much nitre, or what contains much culinary salt; but when they asserted, that of two portions of the same brine, they would make the one into nitre and the other into culinary salt, I was much puzzled, and desired them to go through the process. They accordingly selected saline earth, which contained both the salts, and in the usual manner procured from it a dirty brine, such as is commonly made in the operation for obtaining nitre: this was divided into two portions; the one intended to be made into culinary salt was evaporated until near dryness, when it became soft like clay; and when cold, it formed a dirty saline mass, that deflagrated on the coals without any decrepitation; but still the quantity of muriate of soda that it contains, renders it eatable. The other portion of the brine was only evaporated until it showed a tendency to crystallize when dropped on a plate, and was then strained through a cloth and placed to cool, when of course the nitre shot into fine crystals. The brine which remained, on being evaporated to dryness, gave a salt much freer from earthy impurities than what was called culinary salt, and it contained a greater proportion of muriate of soda, as when placed on burning coals it not only deflagrated, but decrepitated. In fact, by the usual process employed in making nitre, this brine would have been again boiled and cooled twice, and then the nitre having been mostly separated, the remaining brine would have contained an almost pure muriate of soda, and this in fact is usually procured by the workmen who make nitre, while the muriate that is formed during the first boilings, is removed as it falls to the bottom of the vessels. I am assured that the culinary salt thus procured is at least equal in quantity to the nitre, and sells for double the price given by the Company to the workmen for that article. Besides, several other saline earths are found in the province of Behar, with which the salt from Calcutta is supposed to be adulterated.

The following is the manner of refining the nitre at the Company's chief factory;—About 15 *mans* (600 sers) of crude nitre are put into a large copper vessel containing 50 pots (*gharas* of 15 sers each) of boiling water. When dissolved, the brine is taken out with small earthen pots suspended by strings, and poured into large earthen vessels, which contain

each about 6 gharas. In these it stands about an hour to allow the earth to subside. The clear brine is then put into earthen pots (*nads*), containing each about 45 sers, where it remains a day, but no more clay subsides. The whole is then emptied into the copper, and boiled about 2¼ hours. To the hot liquor are then added 30 *mans* of crude nitre, and, when dissolved, the whole is put into the pots, where it stands about 24 minutes, during which it is scummed and the earth is allowed to subside. The brine is then put into the nads, where it remains a day, and deposits 5 or 6 sers of the finest and largest crystals of nitre. Some water is then added to the clay that has subsided, and having washed out the saline particles, is called *moran-ras*. This is added to the ley (*ras*), which is again treated with 30 *mans* of crude nitre, and this is repeated until the whole crude nitre is boiled. The nitre of the subsequent boilings is smaller than that of the first, but all are mixed together. A hundred *mans* of crude nitre give 60 *mans* of refined. The old clay from about the nads, after being kept a year, gives nitre by the usual process. The rainy season is the most favourable for refining nitre. Ashes are not necessary to complete the formation of the nitre, and are only added when the soil is rather stiff. About 20 baskets, each containing 25 or 30 sers (50-60 lbs.) of the saline earth, give 60 sers of brine (*ras*). This boiled and cooled gives a nitre called Gad or Dhoya. The ley remaining after the crystallization is called Kahi, and when boiled and cooled gives a nitre called Rasi. The ley then remaining is is called Jarathi; and when boiled and cooled gives a nitre of the same name. The remaining liquor, called Pachhari, is boiled for a culinary salt, called Khara, or Pakuya-nimak; but, when the ley is poured into the cooler to allow the nitre to crystallize, a quantity of the same culinary salt is always found in the bottom of each pot in which the evaporation has been conducted. The quantity of this salt usually equals that of the nitre, and another boiling would render it much superior to the salt made at Calcutta. The workmen allege that during the season, which lasts six months, each Bhatthi or fire makes only 7 *mans* of this crude nitre, for each of which they get about 1 r., and the *man* consists of 42½ sers of 80 sicca weight, or 87½ lbs. This statement, I am assured, is quite wrong, as the Zemindars have hitherto contrived to ex-

act illegally at least 6 or 7 rs. a year from each furnace. A very intelligent agent of the commercial resident assures me, that the quantity of crude nitre made in these districts is not less than 8,000 *mans*, or 14 *mans* for each furnace, which, after paying the rent, will leave only about 7 rs. profit to the manufacturer, who could not live by such a pittance, did not he make a good deal of the salt that will be next mentioned, and did not he make the Pakuya salt from the nitrous earth. I suppose his real earnings may be 14 *mans* of nitre = 14 rs.; 14 *mans* of Pakuya salt = 17½ rs.; 2 *mans* of Dhar = 4 rs.:— Total, 35½ rs. Deduct 7 rs. for rent, and the profit will be 28½ rs. About one man, one woman, and two boys or girls, are usually employed at each furnace for six months. The 566 furnaces will therefore give about 8,000 *mans* of crude nitre in the season. Were it made worth the while of the manufacturer (*shorahpuz*) the quantity might no doubt be greatly increased; although the workmen allege that the people here, on account of jealousy, will not allow them to scrape their walls, and on these the best nitre is formed.

I am informed that the makers of nitre prepare a salt called Dhar-Nimak; and I am inclined to think that the quantity is considerable, and that much pains are bestowed in concealing the manufacture, because, though I inquired at every Thanah after saline earths, I no where heard of this kind, until the people employed in the Company's factories gave me the information. This salt is said to be found efflorescing on the surface of many parts at a distance from villages, and is called by the same name (*Reher*) with the soda, which effloresces in a similar manner, and it was probably owing to this identity of names that it escaped my notice. It is no doubt the same with the Beldar salt of Puraniya; and, according to the information I have received, is prepared in the same manner as I have described in the account of that district. It forms a granular culinary salt, and although rather bitter, sells at 2 rs a *man*, or double what is allowed for nitre. Of course the makers of nitre prefer as much as possible the manufacture of the Dhar, and prepare the nitre merely as a cloak for the illicit employment. It is usually supposed that the culinary salt from Calcutta is adulterated at Patna with a salt called Khari, which is a purgative salt made in Tirahut, and used for giving to cattle, and in the

manufactures of leather and red lead. I cannot take upon myself positively to contradict this supposition, because an investigation, such as I have above recommended, would be necessary to come at the truth. I am inclined, however, to think that this common opinion is a mistake, and that the salt used to adulterate what is imported from Calcutta is this Dhar, or another called Khar, which comes from Tirahut, and which, I am informed, is different from the Khari. I conclude, indeed, that this Khar is in fact the same with the Dhar of Behar, or the Beldari salt of Puraniya, because it sells at the same price, is said to be found in similar situations, and to be prepared in nearly the same manner; but it is said to come to market in solid cakes, which may be owing merely to the ley having been evaporated to dryness. Besides no Dhar is made in Tirahut, nor is any Khar made in Behar, which, considering the vicinity of the districts, is a presumption that the same substance is called by different names. I am told that from 15,000 to 20,000 *mans* of these salts are annually brought to Patna.

As the subject of these saline matters is very curious and important, I hope I shall be excused for mentioning what I once had an opportunity of observing in the Tirahut district. The salt called Khari is made from the saline earth, which effloresces on the surface of several places. It is scraped as usual, and collected at the furnace. A little rice straw is first placed on the ground, and covered with the saline earth to about four inches in thickness. The straw is then burned, and the burnt matter is covered with a foot of straw, and that by four inches of saline earth, when this straw also is burnt, and the same is repeated seven times; after which the heap is covered with some fire-wood, which is burned. The burned saline matter (*bani*) is then put into a cistern of clay, and about 3,000 sers, or 6,000 lbs. of water are poured upon it. Next day the workmen take out the uppermost part of the matter, which had been put into the cistern, and from whence this water has washed the saline parts, and add as much more water, and this is repeated again and again, until all the salt has been extracted, and nothing remains in the cistern but brine. This is then allowed to flow from a cock, and is evaporated in from 30 to 40 earthen pots, placed in a row over a trench, which serves as a furnace, the fuel being

put in at one end, and the smoke coming out at the other. The evaporation is carried to dryness; but the Khari turns out of three different qualities, which is attributed to circumstances in the burning that are beyond the controul of the artists. When the operation has succeeded well, they procure a whitish salt in grains, which is called Phulkhari, and is that given to cattle. It sells at 88 sers (72 s. w.) or 178½ lbs. for the rupee. When the operation has less success, a more impure salt called Sindur-Khari is procured, and is used in the preparation of red lead. It is sold at 96 sers for the rupee. When the operation is least successful, a very black salt is procured in a solid mass. It is called Chamari-khari, being used by tanners, and sells at 112 sers for the rupee. All these I have refined into a very fine purging salt, which in its crystals entirely resembles Glauber's salt, but its taste is not near so strong or disagreeable.

The amount of the exports and imports as taken from the traders, is given in the Appendix*. These districts are most productive of rice, and that of Patna is celebrated throughout Bengal for its fineness.

I have not included the articles imported by European shopkeepers and traders for the Europeans, or by gentlemen for their own consumption, although the amount must be very considerable, but I know not its extent. Very good shoes, boots, and harness, are made at Danapur, by Europeans, and a little is exported.

Here are several merchants called Aratiyas, who receive goods from merchants at a distance, and dispose of them by commission, taking upon themselves the responsibility for the purchaser, on which account they are men of property or credit. They also purchase on commission, and transact business at the custom house for merchants at a distance.

The term Goldar here is usually applied to considerable merchants, who deal by wholesale in grain (Gullah), and in various other articles included under the general title Kerana. Some deal in grain alone, some deal only in the other articles, and others deal in the whole; but all are in common called Goldars, or Mahajans. Chunilal of Bukhlyarpur is

* Dr. Buchanan gives this table as he received it, without vouching for its accuracy.—[Ed.]

the most considerable merchant of this kind, and is supposed to send annually to Calcutta grain to the value of 1,00,000 rs. but he has factories in several districts. Many of them are of the Jain religion, and these are not called Kengiyas, as is done in Bengal. A very few retailers are called Goldars, but they purchase in considerable quantities. The terms Gullah and Kerana are in universal use, but I cannot receive any satisfactory definition of them. Grain is usually said to be Gullah, but mustard and linseed are here reckoned Kerana, and the articles reckoned under the latter term seem to differ in almost every district, and often in every market. Iron, salt, and betle nut seem to be the articles most universally received as such; but the other metals, sugar, and other sweets, ghiu, oil, tobacco, ginger, turmeric, and various drugs, cocoa nuts, and sackcloth, are often included.

Some Gosaings at Daudnagar deal in the same articles, but are not called Goldars. They retain their title, due only to saints, although they have entered keenly into the concerns of the world.

The dealers in cloth are of the next importance, and as I have said, have 22 factories (Parchuniya Kothis) scattered through these districts for purchasing and bleaching muslins and calicoes, a considerable portion of which last they have made into chintz. They also deal in silks, both proper and *tasar;* and in woollens, such as *lui* carpets and blankets. Some bankers (Surrafs) deal not only in the precious metals and coin, but in cotton cloth. European woollens and shawls are dealt in by the highest description of bankers, called Kothiwals.

At Behar I obtained the following estimate of the expences and profits attending the trade in cotton cloth.

To one Korj or 20 pieces of Tunzebs, 40 cubits by 2, 50 rs.; to bleaching, 1 r. 10 anas; to placing the threads at equal distances, 4 anas; to beetling, 2 anas; to ornamenting with silver wire, 5 anas, 3 pice; to brokerage, 13 anas; to customs at Patna, 4 rs. 8 anas; to ox hire to Patna, 3 anas, 6 pice; to boat hire to Calcutta, 1 r. 8 anas.—Total 59 rs. 5 anas, 9 pice. The goods sell at from 70 to 75 rs. say on an average, 72 rs. 8 anas.—Profit 13 rs. 2 anas, 3 pice, or 22 per cent.; besides, if it is exported, the drawback is received on the cloth at the Calcutta value of 72½ rs. while the duty is paid only on the Patna price.

Next in importance to those who deal in cloths, are the dealers in cotton, at least those of Patna. Next to these are

two houses at Patna, who deal in shoes, and have the title of Mahajan, as their capital is considerable, although their profession is degrading.

The druggists (Pasaris) are next in importance, although not only some of the Goldars import drugs, but the highest description of bankers, the Kothiwals, do the same; dealing chiefly in the foreign spiceries, sandal wood, and metals. By far the greater part of the Pasaris are mere retailers.

The Gotasaz deal by wholesale in gold and silver wire, leaf, thread lace, and cloth, which they both export and sell to the Parchuniyas, who are retailers.

Most of the Manihari goods are imported by one banker, a very rich man, and chiefly consist of beads and looking glasses. The other dealers, except eight, and these are not rich, purchase from him, or deal in articles made here, especially in the glass ornaments called Tikli, and are retailers.

One dealer in timber trades to a very considerable extent, sending agents to Gorakpur and Nathpur, and transmitting the timber to Calcutta.

Some persons (Khattik Mahagan) deal by wholesale in hot seasoning. Six persons, Subzifurosh, import vegetables and fruit, and do not retail.

Merchants who come in boats, sell an investment, and purchase another, are not so numerous as in Bengal; but a good many come to *Patna thed Bar* and to Phatuha, and a few to Arwal, Sherpur, and Duriyapur. Besides these, some merchants on a small scale, who cannot afford to have factories for the purchase of cloth, resort annually to Behar, Helsa, Phatuha, Vikram, and Daudnagar, purchase a small investment, and carry it to their usual places of residence. Those who come in boats are called Beruni, purchase chiefly wheat, the finest kind of rice (Basmati), and the pulse called Chana *(Cicer arietinum)*; and bring chiefly salt, betle-nut, cocoa-nut, and iron. The dealers in cloth are called Parchuniyas, a name given also to several kinds of retailers; and they bring chiefly ready money, or sometimes a little silk cloth.

These are all the descriptions of persons except some manufacturers, who deal in wholesale alone, and the total number of such is very inconsiderable; but a great many shopkeepers, who retail, both import and export a little. Such

indeed usually abstain from retailing with their own hand, but they hire a servant, or employ a kinsman to attend the shop. These are what in Puraniya are called Mahajans, and the other four divisions of shopkeepers mentioned in the account of that district exist here also, although among the natives little attention is paid to such distinctions, which are indeed understood, but are not applied so regularly as in Puraniya. A great many of the shopkeepers are here called Furosh, a Persian word, or Phariya, a Hindi term; but they are not synonymous, the former in general retailing very small quantities, and the latter selling nothing under the value of an ana or two; but both Dokandars and Paikars, who in Puraniya deal in the two above-mentioned manners, are terms in common use. The term Parchuniya is applied to a few petty shopkeepers, who seem to differ little from the Phariyas; nor do I know in what the difference consists. The term Amdeh waleh is not here known. The various descriptions of shopkeepers are as follow.

Khichri-furosh are the same with those, who in Bengal are called Mudi, and deal by retail in most of the articles in which the Goldars trade. They all sell grain, cleaned, split, or ground for use, salt, and extract of sugar cane. Many of them sell prepared tobacco; some sell hot seasoning, drugs, platters made of leaves, cotton, and fire-wood, and exchange money; and a few sell oil, ghiu, and cotton cloth. Here they do not entertain strangers. Their usual capital is from 10 to 25 rs.* but a few have as high as 1500, and some have less than 10. In Patna they formerly supplied customers on credit; but their losses became so heavy, that this custom has been abandoned.

The Pinda-furosh are a set of Rajputs, who as has been mentioned in the topography, have the exclusive privilege of supplying the pilgrims at Gaya with the offerings of grain, sugar, and ghiu, which are presented in worship. There were originally only 12 shops, but these have now multiplied to 60 families, and these have again subdivided into about 100 houses. Formerly they paid to Government 3,000 rs. a year, and one-eighth of their whole receipts to the Gayawal

* These facts give a curious insight into the relations of society in a mercantile point of view.—[Ed.]

Brahmans. Mr. Seton removed the tax, but this indulgence, like many others that have been made in the Company's territories, has produced no relief to the persons for whose benefit it was intended; for the Gayawals now take five-sixteenths of the sales. The prices for the offerings are fixed. Those who worship in the Phalgu alone pay 2 anas, the second class pays 4 anas, the third class, if from Hindustan proper, pays 12 anas, from Bengal, 14 anas, if Mahrattas, 1½ r. Those of the fourth or highest class, if from Hindustan or Nepal, pay 1 r. if from Bengal 18 anas, if Mahrattas 2 rs. The reason why the Mahrattas pay so much more than the others is, that they offer by a ser of 72 s. w. while the others give only 48 s. w. These Pinda Furosh, notwithstanding their number, make a very comfortable living, and have mostly brick houses.

Gullah Paikars sell grain, but not in smaller quantities than 5 sers at a time. They seldom sell the pulse split, and never sell meal. They have capitals of from 25 to 1000 rs. and purchase from the farmers and petty dealers (Beparis.)

Parchuniyas, who deal in grain, are the same with the Kathengjas of Puraniya, that is, sell all kinds of grain, except rice. Their capitals are from 50 to 400 rs., and they retail in very small quantities. Gullah-Phariyas deal only in grain, but sell the smallest quantities that are required, and have no larger capitals than the Khichri-furosh. The Nemaki-Paikars deal in salt, in the same manner as the Gullah Paikars deal in grain, and purchase from the merchants. Their capitals are from 100 to 500 rs. Those of Behar deal also in tobacco, ginger, turmeric, and black pepper. The Nemaki Phariyas retail salt in trifling quantities, except in Patna and Daudnagar, where some are rich, and have capitals of from 100 to 4,000 rs. There are Paikars, who deal separately in ghiu and in sweets, and some who deal in both. They retail in quantities not less than 5 sers, and have capitals similar to those who deal in salt. Those who deal in sugar and sweets alone are usually called Khangrsariyas, and sometimes Gurhas. There are also Pariyas, who deal in the above articles, selling very small quantities, and having very small capitals. Oil is chiefly retailed by those who express it from the seed, but much is sold by those who do nothing else, although the greater part, being of the same caste (*Teli*) with

those who make the oil, are not among the natives distinguished from these artists. Most of these sell their oil in the streets. There are others who deal in oil alone, and according to the extent of their capitals are called Paikars, or Phariyas. Some of the oil Paikars are not, however, retailers; but make advances to those who express the oil, and send large quantities to Patna for wholesale. Some of the Khattiks, or Merchai Furosh, are Paikars; but these are confined to Marusgunj, or Marufgunj, in Patna, and import the hot seasonings which they retail from the north side of the Ganges. The other persons of this description are all petty retailers, some of whom have shops, and others are hucksters, who sell in the streets. Their capitals may be from 1 to 50 rs. Those who retail tobacco-leaf as imported are called Tamaku-Phariyas, and generally sell also molasses. None of them have more than 100 rs. capital, buying a few bags at a time. Some Pasaris also sell these articles. Both supply the persons who chew, or who prepare the tobacco for smoking. The Pasaris make and sell some snuff. Some people, called Sulfahwalehs, sit in the street, and supply passengers with water, and the smoke of tobacco and hemp, having all the necessary apparatus. The Gangja Furosh retail hemp buds prepared for smoking, and all pay duty for a licence. One of them is possessed of a large capital (30,000 rs.), and imports almost the whole of what is used. Each of the others may have 100 or 200 rs. The Tambulis retail betle-leaf and the lime used in chewing; a few in shops, but mostly in the streets. They are not all of the Tambuli caste. They have as capitals from 8 anas to 50 rupees, except in Patna, where some have to the extent of 500 rs. The Gandhi deal in rose water, perfumed oils and essences, tooth powder, and the finer kinds of implements used for smoking. They have capitals of from 100 to 1,000 rs. The perfumes are also retailed by those who make them. Some Pasaris, or druggists, as I have mentioned, are merchants, who deal by wholesale; but the common druggists are shopkeepers, although several that retail have some capital, and import their own goods; but these do not sell trifles under the value of a rupee. Many retail in the streets, and some sell salt.

Paper in most small towns is sold by the Pasaris, or druggists, or by the Khichri-furosh, who deal in Pasari goods;

but in Patna some shopkeepers (*Kagusi*) sell nothing else, except blank books for keeping accounts. Some of them purchase the paper rough, and have it smoothed by the Mohurahdar. Their capitals are from 40 to 150 rs. Some persons of the Kayastha tribe hawk about the streets the books in the profane language that are most commonly read. Two Brahmans in Patna hawk almanacks made at Benares.

Some druggists sell soap, and some of those who deal in tobacco do the same; but it is most commonly sold by Paikars, who advance money to the makers, and retail it in any quantity that is wanted. None of their capitals exceed 100 rs. The impure soda called Sajimatti is sold by some druggists; but some Paikars retail nothing else, and purchase it from the west-country merchants, by whom it is imported. They sell the smallest quantities, and have capitals of from 100 to 200 rs. Cotton, both in the seed and the wool alone, is retailed partly by those who clean it (*Dhuniyas*), partly by the Khichri-furosh, and partly by traders who deal in nothing else, and who, according to the extent of their dealings, are called Paikars or Phariyas. Few of the latter have shops, but go about from market to market. The Paikars bring a considerable quantity at a time from Patna, and retail part themselves, and sell part to the Phariyas.

The persons who retail cloth (*Buzaz*) are not distinguished by name from the merchants who deal by wholesale, and many of them in fact import pretty considerable quantities, and a few export as well as retail. In general, they have shops, and have from 20 to 5,000 rs. capital, and one in Patna has 10,000 rs., and two have 50,000 rs. each. A few hawk about the streets. They deal in woollen, silk and cotton; and, in Gaya, a few retail brass and bell-metal vessels. Some dealers in money (*Surraf*) deal also in cloths.

Some merchants (*Mahajans*) from Kasmir retail shawls, the woollen cloth called Lui, and furs, all of which come from their original country. In return they export fine cotton cloths, and must have pretty considerable capitals, that is, perhaps 5,000 rs. each. Chirawalehs are those who hawk turbans in the streets. They purchase from the weavers, and have capitals of from 10 to 30 rs. Some Dom and Pawangriyas sell old clothes. The former collect them from dead bodies, the latter by begging. Such as are fit for wear-

ing are bleached, and sold to the poor. Such as are mere rags are sold to the torch-makers. Some Paikars retail small carpets (*Sutrunji*) and brass implements for smoking tobacco (*Gurguri*). They have capitals of from 200 to 500 rs. Some of those who sell shoes retail also the two above-mentioned articles. Persons called Panchuniyas retail flattened wire (*Badla*), leaf, thread, lace, and cloth of gold or silver, pearls, and coral. They have capitals of from 100 to 2,000 rs. The Churminah Furosh retail shoes. Many have shops, but a few sell in the street. Some in Patna, besides shoes, sell small carpets, and the tubes used in smoking tobacco. Many of those who keep inns sell shoes. Some of the retailers of shoes in Patna have considerable capitals. Two have 50,000 or 60,000 rs. each, and supply merchants with large quantities; 40 have from 100 to 1,500 rs.; the others there, and those in country towns, have from 5 to 100 rs.

Some Dholak-walehs sell in the streets drums, which they have made partly by carpenters and partly by tanners. They have capitals of 4 or 5 rs., which they advance to the artificers. The Selahbunds hawk targets and swords in the streets. Some persons called Lohar-Dokandars, or Furosh, and Chatiya-Furosh, retail iron, sack-cloth, and the hemps of the Crotolaria and Corchorus; but in many country towns iron is retailed by the druggists, and those who deal in iron and sackcloth are sometimes distinct. The Chatiya-Furosh have usually capitals of from 50 to 200 rs.; but two men in Patna, who deal in iron alone, have each 1,000 rs., and purchase it in considerable quantities from the traders that bring it from Ramgar. The Lohasaz sell by retail several kinds of ware made of iron, chiefly nails, hinges, locks, pots, and chains. They have capitals of from 200 to 500 rs., and are confined to Patna. These articles in other parts are sold by the makers. In the country most of the brass and bell-metal vessels are retailed by those who make or repair them; but in Patna chiefly there are some Paikars who advance money to the coppersmiths, and keep shops in which they retail these goods, and they purchase also such as are imported from Kangtoya. Two of them are rich, having 5,000 or 6,000 rs.; the others may have from 100 to 500. One dealer in Gaya has a capital of 1,000 rs. A few cloth-shops in Gaya retail brass vessels. Two men, called Mahajan, having

capitals of about 1,000 rs. each, sell brass and copper vessels, which are polished, and intended for the use of Muhammedans. Some Sindur-walehs, or Paikars, entirely live by retailing red lead, which they import. They have capitals of from 50 to 200 rs., and have shops. Some people, called Ranggasaz live entirely by selling ornaments of tin. They have shops, but sometimes they cry their wares in the street. Their capitals may be from 5 to 20 rs. Some Churisaz live entirely by selling the ornaments made of glass, purchasing from the makers, and keeping shops. They have capitals of from 10 to 50 rs., and are usually called Chur-Furosh. A man, called a Motfurkat, lives by selling old European mirrors that have been purchased at public sales, and repaired glass lanterns, wine bottles, and broken crystal glasses. His stock may be worth 200 rs.

The term Soudagur, which implies merely a principal merchant, is here usually given to those who keep what the English of India call Europe shops; that is, shops where all sorts of goods imported from Europe, and chiefly consumed by Europeans, are retailed. One shopkeeper of this kind at Danapur has some claim to so high a title, as his dealings are pretty considerable. He is an European. The others are natives, and their capitals are very trifling. They deal chiefly in old glass ware, the refuse of the Calcutta shops, and in the most execrable liquors; both of which, I presume, are chiefly purchased by natives. The only other persons here usually called Soudagurs are such as deal in horses. They purchase, chiefly at the Hajípur fair, horses that are reared on the north side of the Ganges, and sell in these districts. Each may annually buy and sell 10 or 12 horses, and are fully as slippery as the dealers of England.

Some Mirshekars deal in singing-birds, or such as are kept as pets. These catch the birds, and hawk them about the street. Some Muhammedan hucksters sell fowls, pigeons, and eggs in the streets, purchasing them in the villages. The Mahi-furosh retail fish, chiefly in the street. A few are of the Kungjra caste, but many belong to tribes, the men of which fish; for those who retail are mostly women. They have capitals of from 4 anas to 125 rs.

The Subzi-furosh Kemanis, or Kungjras, retail vegetables and fruit. A little is sold by the gardeners, but this is not

common, and some of the Kungjras sell fish, but here that custom is much more rare than in Bengal. A very few only have shops: in general they retail sitting in the streets, and have capitals from 100 to 200 rs. The men chiefly purchase, and the women retail. Some people deal in Bhusa, the dry forage usually given to cattle, and retail it in barns, purchasing the loads brought in by farmers and traders. They have capitals of from 10 to 50 rs. Some Parchuniyas deal in grain, others in gold and silver lace, cloth, &c.; and there is a third kind who deal in bamboos, planks, and small posts and beams. The persons, however, who deal in these articles are more usually called Taluya, and in Behar they are called Gangjihara. They purchase from the traders, who bring these commodities from the hills, and sell by retail; and their capitals do not exceed 1,000 rs. It is supposed that on each sale they clear 25 per cent.; and this, indeed, is supposed to be the common rate of profit, which retailers make.

The Kolhuyas deal in Sal and Sisau timber, which they chiefly purchase from the merchants, who bring these articles from Gorakpur; but some of them import on their own account. They often hire people to saw the timbers and retail the planks. They have capitals of from 300 to 2,000 rs. The Kathauti-furosh retail large wooden platters (*khanchah*), basons (*kathauti*), mortars (*ukhli*), pestles (*musar*), and rolling pins (*belna*). All these come from Saran, and are partly turned, partly cut with a small adze. They purchase from the importers, and have from 50 to 100 rs. capital. The Kangchiya-furosh retail mats made of bamboos, baskets, ropes made of the grass called sabe, ropes made of the muj reed, rude bedsteads, wooden mortars and pestles, all imported from the forests of the south. They have capitals of from 25 to 200 rs. The Chatai-furosh retail mats made of reeds (*nal*) and grass (*kus*), which are used chiefly as a covering for commodities in boats. They have capitals of from 50 to 200 rs. Mats are in general sold by the makers, but in Patna a Madurwaleh sells the kinds called here Madur, which come from Bengal, but are all small. He has little capital, procuring a supply from the boatmen that come from that quarter.

Pangkhawalehs retail in the streets rude fans, which the Pasis make of palmira leaves. Some people in Patna live by

purchasing and retailing the platters made of the leaves of the Paras tree (*Butea-frondosa*), and a kind of oakum (*raswat*), used for caulking boats, and prepared from the bark of that elegant tree. They have capitals of from 20 to 40 rs. These have shops; but a few sit in the streets, and are not worth above 4 or 5 rs. Some Vairagis hawk wooden beads, used both as ornaments and as rosaries, and are called Malawalehs. Some people, called Nariyali Paikars, deal chiefly in cocoa nuts, which they retail. They also employ the oilmen to extract the oil, and retail both this and the shells. They have capitals of from 50 to 200 rs. The Nariyali-furosh, again, sell only the implements used for smoking, made either of the cocoa nut or of potters' ware. They have capitals of from 20 to 50 rs. The Dibiya-furosh retail small wooden boxes, covered and painted, that are made by the turners. These artists, however, retail a good many. The mere retailers have capitals of from 40 to 200 rs. The same boxes are also retailed by the Manihari. In the streets of Patna some hucksters (*Kangghaiwalehs*) sell wooden combs for the hair; but many such are sold by the makers, and still more by the Maniharis. The Maniharis, who retail the goods so called, are numerous, and are mostly of the Daphali tribe. Two or three are wholesale dealers, and have been already mentioned; but only a few have shops, and the greater part retails in the street. The goods in which they deal have been mentioned in the accounts of districts already surveyed. Some here deal in false gold and silver wire and lace. Their capitals are from 5 to 200 rs. The Besatis are hucksters, who retail in the streets some kinds of Manihari goods, such as brass and iron hardware, looking-glasses, hair-combs, surma, or drugs for staining the eye-lids, and curry-combs, and also purses, cotton, silk, and woollen strings, tape, and wooden cups and boxes. Their capitals are from 5 to 50 rs.

Stone plates and cups, millstones, and stones for grinding curry, in Patna and Gaya, are mostly sold by the makers; but there are persons who merely buy and sell by retail, and have capitals of from 50 to 100 rs. They are called Sungturash Dokandars. The potters dispose of most of their own ware, but there are some persons who live by retailing pots, and are called Hangri-furosh and Bharchariyas. Their capitals are from 5 to 40 rs. Some people (*Sorahiwalehs*) sell

earthen bottles and pots for cooling water, and earthen vessels painted with porcelain clay, but the same things are often retailed by the makers.

The artificers, who retail in shops or in the streets, are as follows :—

Tallowchandlers, 23; laheri, 33; soap-makers, 21; torch-makers, 24; churihara, 34; wax-chandlers, 22; malis, 38; ink-makers, 39; glass-blowers, 37; basket-makers, 42,43; petara-makers, 44; umbrella-makers, 40; paper kite-makers, 48; cleavers of firewood, 94; morhasaz, 45; chamar, 54; khugirdoz, 59; chik, 51; naychahbund, 61; nariyali hokka-makers, 62; whip-makers, 60; tobacconists, 64; majunwalehs, 66; Diyawal, 63; pasis, 68; perfumers, 70; distillers, 67; Dahiyars, 73; butter-makers, 74; oil-men, 72; halwais, 76; khanchahwaleh, 77; mayras, 75; khasiyawaleh, 79; kungjtilayi, 80; bharbhuna, 78; dalhara, 82; bakers, 83; millers, 81; small meat-butchers, 85; black cattle-butchers, 86; faludahwaleh, 84; wooden comb-makers, 89; kharadi, 90; khandigars, 88; blacksmiths, 97; birdcage-makers, 98; carpenters, 95; needle-makers, 103; copper-smiths, 104; arrow-makers, 102; rangdhaluya, 110; jewellers, 113; brass ornament-makers, 105; potters, 124; lime-makers, 129; stone-cutters, 123; brick-makers, 127; chints-printers, 144; cotton-beaters, 130; weavers, 137; carpet-makers, 147; tape-makers, 153; glove-makers, 146; kangjar, 155; tashbaf, 149; patwar, 153.

In most of these trades it is a few alone that retail; but in others almost every one disposes in this manner of his goods. In these districts, as well as in Puraniya, some Paikars are like the Amdehwalehs of Bengal, that is, they purchase cargoes as imported, and dispose of them in smaller lots; others are mere shopkeepers; and finally others are petty traders, who do not retail, but purchase small investments from the merchant, and dispose of them to shopkeepers in various towns, and again collect from the farmers and manufacturers small cargoes, which they deliver to the merchant. These last-mentioned Paikars are not very numerous; because they decline in general to keep oxen, and therefore they live chiefly in towns, and purchase up the articles which are brought for sale by the Baldiya Beparis.* These Beparis carry on by far the greater part of the internal commerce of these districts. They are often called Ladu Baldiya, or Telibeparis, from the nature of their profession, or from their caste. Besides their oxen many have very little capital, 5 rs. in money being reckoned sufficient to enable a man to trade with one ox.

* Many of these terms will be explained in the subsequent vols.—[Ed.]

With such a stock it is supposed that he can gain 32 rs. a year, selling 50 rs. worth a month, with a profit of from 1 to 2 anas on the rupee; but if he has more than three or four oxen, he must hire servants in proportion. For security several usually travel in company, unless when one man and his servants are sufficiently strong. From 5 to 50 rs. and from 1 to 10 oxen are the usual rate of stock which these men possess, those who have one or two oxen only assisting their more wealthy companions, and receiving a reward for their trouble. Some, however, especially in Sheykhpurah, Nawada, and Daudnagar, deal to the extent of 500 or 600 rs. with cattle in proportion; and it is supposed that in the two former divisions some of these have accumulated large sums (from 1000 to 20,000 rs.), although from their appearance one would not suppose them to be worth a crown. They are all willing to hire their cattle, and only trade when they cannot procure fare. Some of them are called Kuttiwalehs, because they purchase rice in the husk, employ people to beat it, and then sell the clean grain. They are also called Chutkiyas, or handfulmen, because they carry in their hand a muster of the commodity which they have for sale.

The Grihastha-beparis, or farmers who trade, are in some places called Barsariyas, are not very numerous, and seldom keep cattle for carrying loads; they purchase the commodities from their neighbours, and either sell them to the Baldiyabeparis, or hire these to carry them to market. Besides their stock employed in agriculture, they have from 100 to 1200 rs. engaged in commerce, and cannot in the year turn their capital more than twice, whereas the ladu-beparis turn their capital from 3 to 10 times a month during the 8 months that the roads admit of their cattle to travel. The Grihastha-beparis purchase the produce of the farms at harvest, or even before it is ripe, and sell five or six months afterwards when the price has risen. It is usually supposed that they make 20 per cent. on each crop; but their gains are probably greater, as the farmers who deal with them are considered as more necessitous than those who borrow money at the rate of 25 per cent. for 16 months. The Pheri-walehs or pedlars deal chiefly in cloth, the police having prevented their dealing in copper vessels, as it was supposed that they dealt chiefly in stolen goods. Those who have their family

residence in the town of Behar, on account of their caste, are called Bhojpuriya Nuniyars, and have capitals of from 50 to 500 rs.; but many frequent these districts whose family residences are unknown.

There are a good many Delals or brokers, who have no capital engaged in trade, and live by making bargains for others. In Patna they have the shopkeepers under a good deal of subjection, and scarcely any purchase, even to the value of one rupee, can be made without their interference, and of course they enhance the price by the amount of their commission. It is of no use ordering them to go away, because they stand at the door and receive the commission when you go; nor can the least dependence be placed on their assistance in preventing the purchaser from being defrauded. In fact, they are a public nuisance. Some men who were formerly employed by the Company still retain the title, but have, in fact, become merchants, and purchase on their own account.

At Behar are a kind of brokers called Goldars, who must be carefully distinguished from the merchants of the same name. The Goldars of the town of Behar have no capital, except a warehouse and a set of weights, with which they accommodate those who employ them as agents, either to buy or sell. They receive a commission of from one-quarter to one ser of grain on every rupee's worth that they sell. I have already mentioned a kind of merchants or agents named Aratiyas, but there are also Aratiyas, who keep commission warehouses; they receive various kinds of goods, according to their different inclinations, and dispose of these on commission. They are responsible for the proceeds and furnish the warehouse. On iron they get one-half per cent., on other goods 1 per cent. from each party. Some of them are agents, who purchase cloth for merchants residing at a distance.

Some bankers at Gaya and Daudnagar are called by the same name Aratiya. They grant bills for cash on Patna and Benares, charging half per cent. on the former, and one per cent. on the latter. They will also give money for good bills drawn on them from these two cities, but do not discount.

At Patna are 24 proper bankers (Kothiwals), and one of them has a house at Gaya. They will all discount bills, payable either here or at Calcutta, Benares, and Moorshe-

dabad. Some of them have also agents at Lucknow and Dhaka, one has an agent in Nepal, and the house of Jagat Seth has agents at Madras and Bombay in the south, and at all great towns within the Company's protection; but it has, I am told, withdrawn all the factories from the places under native anarchy. All the houses have extensive credit. Besides dealing in money, some of them trade in European woollen cloths, jewels, foreign spiceries, metals imported by sea, and the finer kinds of cloth of cotton, silk, and lace.

The Surrafs here exchange money, and purchase and sell bullion. There are here no Fotdars, but many of the Surrafs have very petty capitals, and merely exchange silver and copper. In Patna, Gaya, and Behar, where their capitals are above 400 rs. they will exchange gold and silver. Everywhere silver may be procured for gold; but it is only in the capitals that gold is procurable for silver. The Surrafs lend money to those living on monthly wages. The rich Surrafs and the Kothiwals supply the Zemindars, and pay the revenue, which operation is now their chief support.

Those who lend money are here called Nukudi-Mahajans and Ugahiya. Sums of consequence, such as 1000 rs. may, for this last year or two, be had for 12 per cent. a year, when bullion or jewels are lodged as security. Until then 15 per cent. was considered reasonable, and sums under 100 rs. cannot be even now procured at less than 18 or 20. Poor people in the country, who borrow on pledges of copper or silver, pay from one-half to one ana on the rupee a month. Traders often borrow from them, giving for 100 rs. a bond for 125, payable by equal instalments in 15 months.

A kind of usurers, called Athoyaras, lend 15 Gandas (60) of Paysas, and take a bond for 20 Gandas, that is 80, payable by weekly instalments of 4 Paysas. These people have no capital, but borrow from the Ugahiyas, and lend to petty hucksters, especially those who retail fish and vegetables.

Coins, Weights, and Measures.—Cash can at all times be readily had at Patna for bank-notes, sometimes without discount, and never for more than one-half per cent. The bankers also will supply bank-notes for cash, and usually require a premium of one-half per cent. Gold has almost totally disappeared, and 16¼ rs. are now required for the

Ashrufi or gold mohur. Within these 17 years gold was the most common currency, and the Mohur then often fetched only 14 rs. I do not know exactly the reason of this change; but think it probable, that great quantities of gold are hoarded by some rich men at Calcutta, and by the Nawab Vizier. The gold is preferred as less bulky than silver. About three-quarters of the silver is the Kuldar coinage of Calcutta, of which perhaps one-quarter is marked. The remaining quarter consists of the old rupees of Calcutta, Moorshedabad, and Patna. Both the marked Kuldars and the old rupees pass for whatever the money changers please, and in some country parts they have contrived that the old unmilled rupees of the 19th year should be preferred to the new milled currency, on which they actually levy an exchange. There are very few half or quarter rupees, the latter of which ought to be made the common currency, as being here a sum of at least as much importance as half-a-crown is in England. The money brought by pilgrims, which is of very considerable amount, is purchased by the bankers, and I presume is sent to the mint, as none remains in currency except in the town of Gaya, where a part remains in circulation until it can be purchased. Cowries are scarcely current, and the only small money in common use consists of copper Paysas, of which 56 most usually pass for a rupee. In Patna the Company's new Paysas, with a decent legend, is almost alone in use; but in the country a good many of the rude masses called Gorakpuri Paysas are still in circulation. At Gaya the Madhusahis are pretty common. The Government lately sent up Paysas to the value of 40,000 rupees, and distributed them at the mint price of 64 for the rupee, for which I know no good reason, as even this great influx lowered the exchange to only 58 for the rupee, and the fair at Hajipur will probably reduce them to 54; so that the persons, who took them from the collector, for two months' interest will have above 15½ per cent. This fair, and the two months of marriage ceremony, usually raise the price of the copper about 4 per cent. There is as great a want felt from the size of the copper, as from that of the silver coin, and half and quarter Paysas would be a great advantage. Most things of little value, here as well as in Bhagalpur, are sold by an imaginary money called Taka, which is here

reckoned equal to two Paysas. There are also imaginary monies called Chadam and Damri; the former is equal to 1 Paysa or 25 cowries, the latter is equal to one-eighth of a Paysa.

The weights vary in almost every town, both in the ser and in the number of sers, that are contained in the *man;* but the standard is somewhat better ascertained. In general the Calcutta sicca weight is considered as the standard, but the Kuldar rupee is taken as the means of ascertaining this, which it does not exactly do, being a trifle less. In other places the Madhusahi paysa, is considered the standard, although, except at Gaya, it is seldom procurable. Both these standards are sometimes required, even in the same town, for the weights used in dealing in different commodities. Everything, except oil and milk, is sold by weight, and even oil, when sold by wholesale, is always weighed. The weights are all made of stone, and no regular attention has been paid to have them examined or stamped, although orders have been occasionally issued to have these operations performed; but in most places this has not been done for 10 or 12 years, and in some for 20; nor is any one molested for using such as are not stamped. I have indeed before-mentioned, that without proper standards the expedient of stamping is dangerous. It is supposed, that many of the weights now in use are fraudulent.

In every manor (*Mawza*), I have mentioned, that a hereditary weigher (*Sonar*), forms a part of the establishment, and not only weighs the crops when divided between the landlord and tenant, but whatever the merchant purchases; and it is by a commission from the merchant that these persons, and most of the manorial establishment are usually paid. This reconciles both master and tenant to the burthen, as the whole expense is nominally derived from the allowance given by the merchant to the weigher.

In some towns are men called Dandidars, who live by weighing commodities, and have apparatus for weighing at a time pretty large quantities, such as 2 *mans* or an hundred weight. At Gaya these weighers are paid one-half ser of grain for every rupee's worth that they weigh, or one-half ser of grain for the *man* of Ghiu, 3 anas for weighing a load (4 *mans*) of tobacco, 2 anas for a load of sugar or iron, and 3 anas for a load of oil or salt. The *man* is about 82lbs. The weighers in the country never weigh more at once than one Paseri, which

should be 5 sers, as the name implies, but here, as well as in Bhagalpur, it often contains more. The scales of both kinds of weighers are very imperfect, and admit of the usual frauds. In the collector's office there is no standard for the land measure. In the account of the estates I have stated the different kinds in use. The land is measured by a rod as in Bhagalpur.

The cloth measure, upon which most dependence is to be placed, is the length of a man's arm, which forms the cubit, divided into seven Gerahs; but what is most commonly used is the Guzor yard. The Company everywhere uses a Guz of the same length, 18 of which are supposed to be 40 cubits long, so that each contains 40 inches; but in every vicinity the Guz used in the markets differs from the Company's, and and from those used in other vicinities; and those in actual use are not made from any standard Guz, but by measuring a rod with the arm. It must be observed, that all cloths sold here in the bazaar are shorter, and in general narrower, than the sellers pretend. The most common cloth for instance, is called Sole-guzi, because each piece should contain 16 yards; but few will be found that measure 15½, many measure still less.

Conveyance of Goods—As will appear from the account of the rivers a great part of these districts is destitute of water carriage; nor on the great river is the number of boats so great, as might have been expected.

At Patna and Danapur are kept a good many boats for the accommodation of the great in travelling, especially for the use of Europeans; and some persons of rank, both European and native, keep such for their own use. The boats are of two kinds, pinnaces and Bajras.* The former are built somewhat after the European manner, with a keel, square stern, and bluff bows; but are very flat bottomed, and draw little water. The Bajras are on the native structure, have no keel, and are sharp at both ends. Both are square-rigged after the European manner, most usually as brigs; but they are so flat, that they can seldom sail, unless the wind be aft the beam; and, if there is much wind, they are usually blown on shore, and must proceed by tracking, even when going down

* Dr. B. spells most of his words different from modern Indian orthographists, the word *Bajras* is now written *Budgerow*.—[Ed.]

the river. All have oars, but these produce little effect, and will by no means stem either wind or current; but they enable the people in calms to keep the boat in the current, or to cross from one side to the other. This however, is performed so slowly, that the boat in crossing is always swept far down the current. Their accommodations are excellent, and the traveller lives in them with almost every comfort, that he would have in a house. The hire here is vastly more reasonable than at Calcutta, especially for the pinnaces, which pay at the rate of 12 rupees a month for the oar, while the Bajras pay only 8. At Calcutta a 16 oared Bajra pays 5½ rs. a day, and a pinnace 10 rs. while they are most wretchedly found in stores and men, a 16 oared pinnace having only 16 rowers and one steersman, whereas at Patna a 16 oared boat has a crew of 19 men. A few smaller boats, Bhaulujas and Pansis, are kept at Patna by individuals for their own use in travelling, but are not let for hire.*

The boats used for the conveyance of merchandize are Ulaks and Patilas, both of which have been already described, and those of both kinds, being of equal burthens, pay the same hire. The Ulaks of Patna are not near so neat as those of Bengal. Some very large have no cover, and are called Huliyas. The freight from Patna to Calcutta is usually from 12 to 15 rs. for the 100 *mans* of grain (76 s. w. a ser.) equal to about 7,800 lbs.; but in October 1812, owing to heavy losses by a storm in the preceding month it rose to 20 rs. Before that storm, boats were more easily procurable at Patna, than in any of the districts hitherto surveyed.

The Dinggis or open boats used in fishing, and as ferries, are exceedingly bad, and are mostly clinker-built. A very few canoes (*Ekthas*) are used, and come from Nepal. They are large, carrying 40 or 50 *mans* of grain, or from 312 to 390 lbs.

Little or no advantage is taken of the immense torrents to float down any kind of commodity; and during the rainy season all internal commerce is at a complete stand, as the roads are then so bad, as not to admit of even cattle travelling with back loads. I have seen no country, that could be

* These statements shew the advantages derivable from a Steam Navigation Company for the rivers in India as now projected by the indefatigable and intelligent Mr. Howel.—[Ed.]

called at all civilized, where so little attention has been paid to this important object, and even in the vicinity of the two jails, where many convicts sentenced to labour are confined, very little has been done.

The cross roads from market to market are those which are chiefly wanted, and no one who has not seen the condition of these, could believe that a country so extremely populous and rich, and having such occasion for land conveyance, should be so ill provided. These roads ought to be made at the expense of the landholders, and especially in these districts by those who pay no revenue, and with care it would cost them very little. In many parts these roads might be formed by widening somewhat the banks used for collecting water for the cultivation of rice, and by connecting one of these banks with another in the short intervals that are now between them. In parts of the country where there are few such banks, great advantage might result from compelling the landholders to make them, as it is in general owing to indolence and neglect that they have not been made. In the inundated parts of the district an equal advantage would arise from banks made to exclude the superfluous water, and where the country is not fit for rice and not inundated, the roads are kept up with little or no trouble. The object, as I have said in such roads, is not to enable gentlemen to drive their curricles, but to enable cattle carrying back loads to pass at all seasons from one market to another, and in the fair season to enable carts to do the same.*

Except where hard materials are procurable on the spot, I believe the use of carts should be altogether prohibited during the rainy season; but in many parts of these districts stone is every where at hand. The natives here are fully sensible of the vast advantage attending the use of carts, in preference to back loads; and the roads through which I saw carts conducted, really astonished me. After the rice crop has been cut, until the rainy season commences, the ground is indeed everywhere so firm, that carts may be taken in almost every direction, a little levelling of banks and cut-

* Considerable improvement is now taking place in the roads throughout India. [*Ed.*]

ting of slopes into the channels of rivers is all that is necessary; but this can only be done by persons of rank travelling, and goods are not much conveyed in wheel carriages, except about large towns, and on the routes between Patna and Danapur, Patna and Gaya, Patna and Behar, and Patna and Daudnagar.

Most of the carts are of the same structure with those at Puraniya, and the hire at Patna for a cart with two oxen, is from four to eight anas a day; with three or four oxen the hire is about 12 anas a day. At Gaya, the police has fixed the price at 20½ rs. a month, but this is to be understood of carts furnished to European travellers, or troops marching; natives pay only 15 rs. From Gaya to Patna a cart takes from 12 to 15 *mans* (each 82 lbs.), and the hire to the merchant is three rupees; the distance is reckoned 72 miles.

Horses are not employed to carry loads, but a few asses or mules are loaded at Patna and Gaya, They are not let for hire. At most of the inns (*Sarays*), riding ponies are kept for hire, and let at 12 Paysas a day. Most of the goods are conveyed by oxen in back loads; nor in many parts is any other mode of conveyance procurable. The cattle to be let for hire are very numerous and pretty good, as they will usually carry about 250 lbs. 12 miles a day. The hire is from two to five anas a day. From Gaya to Patna (72 miles) the hire is five anas for the *man* of 82 lb. Porters are only employed to carry goods from one place of a town to another, or to carry the baggage of travellers; they may be readily enough procured in towns, but in the country the traveller in general will find much difficulty. In some parts, indeed, the weavers are held bound to convey the baggage of travellers of rank, and receive a consideration from the Zemindar; for according to old custom, the Zemindars were formerly bound to provide travellers, at least such as were in the service of government, and they still are willing to assist, although I believe they are not legally bound.

The ferry-boats are in general very bad, and, except at Phatuha, where government defrays the expense and keeps excellent boats, I believe are left entirely to the discretion of the Zemindars, who make the most of them that they can, at the least possible expense. The police does not interfere farther than to compel the ferry-men to enter into engage-

ments for the discovery of suspicious persons that attempt to pass. In some places it was stated, that where the Zemindar finds the boat, he takes two-thirds of the fare, and where the boat is found by the ferry-man, that the Zemindar is contented with one-third; and, I believe, he well may be so, as his right to any part is exceedingly doubtful. I heard of only one Sadabrata where strangers are received gratis, and it is almost entirely confined to the reception of Sannyasis, and belongs to the great convent of that order at Buddha Gaya.

The Khichri-furosh, who retail provisions, do not here receive strangers into their houses, and native travellers are in many parts a good deal difficulted to procure any accomodation. Men of a religious character will be generally taken into some temple or convent, but the profane in villages or small market towns must usually sleep under a tree, unless there is some shed for the accommodation of hucksters. In towns, some empty house is usually procurable, the difficulty not arising from churlishness, but from the jealousy of the men. There are, however, scattered through the district many inns (Sarays) on the same footing with those in Bhagalpur. These are institutions highly deserving the encouragement of government, and were formerly so considered; but at present the keepers are left to their own exertions, and complain that the understrappers of police often use their accommodations without payment, and some inns have been abandoned owing to the trouble into which the keepers were thrown, in consequence of thefts committed within their premises. In the present state of the country, all that could be perhaps done, would be to secure a space sufficient for the inn by a good wall, and by two or three watchmen, to exempt the keepers from all taxes or ground-rent, and to direct the native officers of police to give them prompt assistance in case of complaints. For this purpose vague orders are not at all sufficient, but a copy of regulations should be suspended in the gate of each inn, and the Darogah should be held bound to send to the magistrate whatever person infringed them. The keepers here usually sell grass for horses, firewood, pots, tobacco, and the charcoal bulls used in smoking. Some sell shoes, and a great many let ponies to hire. At Daudnagar there remains a handsome saray of

brick, but it has been converted into dwelling houses by the descendants of the person who built it, whose numbers can no longer be decently supported by the landed property which he left. This usurpation is therefore somewhat excusable, nor are such buildings necessary. The common huts erected by the Bhathiyaras are sufficient for the present rude state of the country; but it is much to be wished that on all great roads, inns were established at regular distances, and secured from the depredation of thieves in the manner I have above mentioned. The expense might perhaps be defrayed by the sale of tobacco and betle, the exclusive privilege of retailing which near the inn might be farmed by one of the keepers. Here, as well as in Bhagalpur, are several bungaloes belonging to the invalid establishment, concerning which I have no occasion to make further remarks.

Shopkeepers, on the great road near the Ganges, extort heavy contributions from travellers. At Sherpur, for instance, situated in a most plentiful country, and sending all the produce by land to Danapur and Patna, I found provisions were sold at from one-sixteenth to one-fourth higher than in either of these two towns.

END OF BEHAR AND PATNA.

[The survey closes in this manner, without any conclusions being drawn from the facts collected.]—Ed.

HISTORY, TOPOGRAPHY, ANTIQUITIES, &c.

OF THE

PROVINCE OF SHAHABAD.

BOOK II.

DISTRICT OF SHAHABAD.

CHAPTER I.

AREA, TOPOGRAPHY, RIVERS, LAKES AND MARSHES, METEOROLOGY, &c.

The greatest length of this district in a direct line is along the Son, and extends about 117 British miles. Its greatest width, crossing the above line at right angles, from the Karmanasa, where it begins to form the boundary on the plain between the provinces of Behar and Banaras and the Son, a little north from Rautas Gar, is about 52 miles. According to Major Rennell, its southern extremity on the Son is in about 24° 31′ north latitude, and its northern point near the Dewha is in about 25° 52′. Its eastern extremity on the Ganges is about 3° 21′ west from the meridian of Calcutta, and its western extremity on the Son is extended 1° 32′ further in that direction. It contains 4,087 square British miles, and, although long and narrow, is tolerably compact, except that it sends a projecting corner across the Ganges, and that a portion of Merzapur projects into its middle across the Karmanasa, and another across the Ganges.

SOIL.—On the lowlands there is very little barren soil absolutely unfit for the plough, and I nowhere heard the calcareous nodules accused of producing sterility; but in this district they are seldom mixed with the surface; nor do I recollect seeing any of them except on the banks of torrents, or towards the bottom of wells. Close to the hills in most



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J. & C. Walker Sculp.t

parts the soil is excellent, nor is it broken into ravines, except in a very few of the recesses among the mountains. This broken ground is, indeed, in a great measure confined to the vicinity of Shergar, especially in the great recess west from that old fortress, and to that of the small hills which are scattered along the bank of the Son in the upper part of its course. In the same vicinities, and in the great recess north from Rautasgar, a good deal of the level land is destroyed by stones, gravel, and sand; but in general the soil, within a few yards of the most barren rocks, is excellent. At a distance from the hills a very little land, in detached spots, is too sandy for use, and in some even it consists of barren gravel; but, except in the division of Ramgar, this barren land, so far as I could judge, nowhere in any one division amounts to a square mile. The Ganges in this part seems to deposit only a rich mould; and it is the west wind alone that blows up the sand from the extensive channel of the Son, so that this district in a great measure has escaped from destructive depositions of sand. Towards the Son the natives indeed talk of having much Ush, Ushar, Reher, and Bala land; but except a few small plots of Reher, too much impregnated with soda, and these not near the Son, and the few sandy spots, all seems abundantly capable of cultivation, and a great part denominated Ush, Ushar, Reher, and Bala, is abundantly under crop.

This light sandy soil extends in most places 3 or 4 cos from the Son, and occupies a great part of the country in that direction, except towards the mouth of the river, where the soil is richer. This soil may be divided into two kinds. One is quite free, consisting of fine sand mixed with a loose mould, and is usually called Bala, Ush, Ushar, and Reher, between the application of which terms I could not trace any difference. The other consists of a very tenacious clay intermixed with a great deal of coarse sand. In dry weather this forms a clod abundantly hard, so that then it may be readily mistaken for clay; but, when moist, it dissolves into a mud, which has no sort of tenacity, and readily parts with the water. Both soils, when kept moist, are abundantly productive, but, without much labour bestowed on irrigation, they will produce only some pulses, that are sown in the rainy season. In these districts a free mould forms every

where a considerable portion of the soil, and in the lowlands is never of a red colour. It is generally of various shades of ash; when it inclines to yellow, as in some places is the case, it is called Gorangth, but the same term is applied to clay, when of the same colour. When the mould is quite free, and in a dry state has little tenacity, it is called Dhush, Pairu, and Dorasa; when it contains a portion of clay, it is called Sigat. This distinction, however, is not very exactly observed, and all the four terms are sometimes applied indiscriminately to soils apparently quite similar. This free mould in the inland parts requires a good deal of irrigation in the dry season; but with that is very productive, and even without it linseed and several kinds of pulse come to tolerable perfection, while all the crops that grow in the rainy season succeed well; and near the Ganges, even in the dry season, it produces every grain in luxuriance, with no watering and almost no trouble.

The clay lands are, on the whole, reckoned the most valuable, as they are the most retentive of moisture, and produce wheat, barley, and all winter crops without irrigation; except Chana, however, lentils and linseed, all the crops when watered are more luxuriant, even on the best clays, nor did I even hear it alleged, as was done in some parts of Behar, that watering did harm. When the clay soils are of the various shades of ash, they are called Karel and Kebal; when of a yellowish tinge, as I have already mentioned, they are called Gorangth; nor in the lowlands are there on the surface any soils of a red colour. The hills have much more soil than those in any of the districts hitherto surveyed. The surface of the table land, of which their great mass consists, is indeed much diversified by hills and vales, and in many places is too steep or too rocky for the plough; but there is, also, a good deal of land abundantly capable of being laboured. In general this is of a reddish colour, like the soil which in the south of India is considered as best adapted for the Eleusine Corocanus: and although not very stiff, this is pretty retentive of moisture, so that, where cultivated, even in the dry season, it produces several crops without watering. These crops are not good; but this appears to be more owing to want of skill in the farmers than to the fault of the soil; for maize and arahar are probably the crops best fitted for such

land in this climate, and hitherto these have not been introduced.

ELEVATION.—The hills differ a good deal in their appearance and structure from those in the districts hitherto surveyed. Although their sides are perhaps still more abrupt than is usual towards the east, their summits are comparatively level and smooth. The most common height, I conjecture, without any guide, however, but their appearance to the eye may be about 500 feet perpendicular; and a considerable portion of this height, generally from about one-third to two-thirds, and commencing near their summit, consists of a perpendicular or even overhanging naked rock, composed of horizontal layers, or strata like a regular built wall. In some places this perpendicular wall rises to the very summit; in others there is above it a short rocky slope, on which are scattered tufts of long grass and stunted bushes of the most parched appearance. At the bottom of the perpendicular wall is a slope, generally very steep, and rising usually from the plain at about an angle of 60° or 70°. This slope, on the surface at least, consists of confused fragments of rock, generally, however, intermixed with a good deal of soil, and covered with trees and bamboos. Neither grow to a magnificent size; but the trees, when not stunted by frequent cutting, reach the size that is common in the puny plantations of our British isles. The small detached hills, according to their length, terminate in a narrow ridge or point, and the bare rocky wall towards their summit is thus often exposed quite naked in the most fantastic forms, but the great mass consists of one elevated table, surrounded on all sides by the abrupt precipice as above described.

The boundaries of this table land are irregular, and in some places, are deeply indented by narrow recesses or glens, which are of the most picturesque but savage grandeur, being surrounded by the lofty rocky wall above described, with its base fringed with woods. In the dry season everything however is parched and dismal, nor is their savage ruggedness enlivened by the clear streams and winding lakes, that soften the aspect of the Scottish highlands. In the rainy season the verdure of the trees, and the roaring of the torrents swollen to a tremendous power, must render these recesses truly magnificent; but then they are the abode of disease, and

from the enlargement of the torrents are scarcely penetrable. These torrents generally fall down the precipice at the deepest angles of the recesses, where the rock is from 100 to 200 feet in perpendicular height. Some of the *ghats* or passages, by which there is the easiest access to the table land, are from these recesses; but never at their farthest extremities, which as I have said, are always occupied by some torrent falling over a perpendicular, or more often an overhanging rock. The *ghats*, that are situated in these receses, are always on the face of some part projecting between two arms of the recess. By far the greater part of them are of exceedingly difficult access, and might be defended by small bodies of men against great numbers; and, where it has been necessary, on account of the fortresses erected on the table land, to render the ascent more easy, recourse has usually been had to forming stairs. Winding roads might no doubt be readily constructed, which would have given easy access to loaded cattle; but, in the state of military architecture, when these strongholds were erected, such roads would have been considered as weakening the defences. Although all the *ghats*, which are numerous, are of very difficult access, yet by several of them, oxen carry up small loads of grain and salt, and bring down much more grain and some timber. Two of the most frequented are Sarki and Kariyari, the one near the south-west boundary of the district, and the other in the deep recess north from Rautas. I went up the one, and down the other, with some necessary baggage and small tents; but had not the roads been reported much easier than I found them, I would not have made the attempt. Kariyari ghat is the route, by which Colonel Crawford led a military detachment with guns to take Vijayagiri (Bidzigar R). He no doubt, employed many pioneers to smooth the way; but even with their assistance the enterprize must have been difficult; for the pass, although shorter, is far more difficult than any of those which I saw leading up to Mysore. Two passes on the northern face of the hills are much easier, and one of them was much nearer to Vijayagiri than Kariyari is; but they were probably unknown to Colonel Crawford, the geography of these parts being still very imperfect. The one is about two miles south from Shahasram, and is called Khuta ghat.

The other is on the right side of the recess, through which the Karmanasa runs, after it falls from the precipice called Chhanpathar, at the very western boundary of the district. Both passages are no doubt very rugged; but the declivity in both is moderate, and smoothing the rock is almost all, that would be required at Khuta ghat, to render it a tolerable passage for carriages. Two bridges in addition, over two very deep and wide torrents, would be required on the passage near the Karmanasa; but even this is vastly easier than either Sarki or Kariyari.

Above the rocky boundary by which this hilly region is surrounded the table land is not level, as the name, which use has consecrated for such situations, would strictly imply. It is, in fact, very hilly; but the hills are detached, of comparative little elevation, and not so steep as the grand boundary of the highland region. On this account roads of tolerable easy access, and which might be rendered good, traverse it in many directions. The greater part of the space between these smaller hills consists of swelling lands, in some places, as I have said, filled with rocks and stones, so as to be unfit for cultivation; but in many places it very much resembles Karnata in soil and appearance; and no doubt, as the climate is more favourable, is capable of being rendered equally productive. It has, however, been very much neglected. Immediately around the small villages scattered through this waste a few fields are enclosed by hedges of dry thorns, and, receiving some manure, are cultivated for wheat, barley, and mustard, and, so far as the fields can be well manured, these perhaps are the most suitable crops; but, as in the present system of Hindu agriculture any considerable supply of manure is unattainable, other crops should be taken. A great deal of this land might, by reservoirs, be converted into rice fields, and the remainder would answer very well for maize mixed, as in Bhagalpur, with arahar, kodo, or maruya, all very valuable crops. The small rents hitherto exacted from the inhabitants of the hills have not however proved a sufficient excitement to industry; and, except the few fields round their houses, swelling lands have been almost totally neglected. They have cleared a considerable space round each village for pasture, and in the rainy season it yields abundance, but in the dry produces

very little, although it is ornamented as well as shaded by trees of the mahuya, mango, banyan, and pipal. This land is kept clear by small parts being ploughed after long fallows, and sown with pulse; but the produce either of this or of the trees is of little importance. The chief attention of these highlanders is paid to the cultivation of some very narrow vallies that wind through the swelling grounds, and, although seldom above 100 yards wide, run to considerable lengths. These contain numerous springs of water, by which they are admirably fitted for rice, and produce it more luxuriantly than any where that I have seen, except the borders of Virbhum and Bhagalpur, and the trouble of cultivation is next to nothing. Although three-fourths of the whole cultivation on the table land consists of this description of land, its whole extent is trifling, and, notwithstanding its value, some part is neglected.

The table land is on the whole highest towards the south; but it is there less broken by hills and rocks than its low part toward the Gangetic plain. The springs there are also more numerous and copious, so that on the whole the southern parts are the most valuable; yet, owing to a low assessment, having less incitement to industry, the tribe of Turkan, which occupies the whole southern half of the table land, contains only 50 occupied villages, while the three northern tribes amount to 70 villages. The small hills near Naukha are the only ones detached at any considerable distance from the great mass; but they are entirely of the same nature and appearance. The low country is on the whole very flat, especially towards the north and west; but even there it is scarcely any where what is called dead level; and near the Son, and for a little way north from the old channel of the Ganges at Bhojpur, there are some considerable swells, generally of a poor sandy nature, and very much neglected. The whole space between the hills and this old channel of the Ganges, which passes immediately north of Bhojpur Biloti and Arah, is in fact a plain fitted for rice, but no where subject to be regularly flooded. When extraordinary falls of rain happen, some portion is liable to be covered for two or three days, but this does not happen every year, and the periods when such floods occur are quite uncertain. They are always supposed to do injury, and in fact often

overwhelm the crops of rice. This seems to have led to an opinion that the water of the Son river is highly destructive to vegetation, which is very generally asserted and believed throughout the district, and is often employed as an excuse for the neglect of irrigation, which might be procured from that river. This quality of the Son water was so often and universally insisted upon, that I began to be staggered when on the upper part of the river's course I discovered some industrious persons watering their lands with the utmost success, although the soil was very poor. The proportion of land liable to be injured by these occasional floods will be seen in the second statistical table.

The highest parts of this low country, except the poor swells above mentioned, have been usually selected for the situation of the villages, and the immediate vicinity of these being let for a money rent, is very carefully cultivated, and, except the fields reserved for sugar and cotton, is indeed almost the only land that is so in this district. The crops are very luxuriant, being carefully watered. This land is called Gongyer or Korar. The latter name implies its being cultivated by the Kairi, a tribe eminent indeed for industry, and which probably introduced this valuable mode of cultivation; but these Kairi are not now the only persons by whom it is employed.

Where the assessment has been so high as to excite industry, all along the gentle declivities, at some distance from the villages, have been drawn ditches, which serve as reservoirs, receiving the water from above, and collecting it for the supply of the fields below in occasional droughts. The fields below are, therefore, usually cultivated with rice, while those between the reservoirs and the villages are cultivated with crops that come to maturity in spring, and do not require so much water as rice does. The lower parts are usually called Keyari, or land divided into plots for preserving water, as usual in the cultivation of rice; but in some parts it is called Palo. The higher parts above the reservoirs are here most usually called Tar, a term which in Behar is given to low lands that during the rainy season are entirely covered with water. The reason of this strange difference in the application of the same word seems to be, that immediately above the reservoir a certain space in the rainy season is

always covered with water. This is cultivated as the water is let out, and, being the most productive, has communicated its name to the whole; but in many parts the term is now applied to signify the highest and most sterile parts of the swelling lands, where no reservoirs were ever constructed.

Both these descriptions of land, the Keyari and Tar, are usually let for a share of the crop, and are generally very carelessly cultivated, while in many parts the forming or repairing of the reservoirs have from various causes been neglected, and there the crops so often fail that much has either been altogether neglected, or has been allowed to run waste. The highest lands immediately adjacent to the villages, and these naturally the poorest, being cultivated with care, are therefore the most productive, and in unfavourable seasons are the chief resource for the alleviation of distress; but it is alleged that the stock usual for a plough would not allow a man to cultivate, in this manner alone, a quantity of land sufficient to pay the high rent demanded, and to furnish him with subsistence. In the intervals of labour he therefore cultivates in a careless manner a great extent of the other two kinds of land; and, when the season is tolerable, his share of the crops supports him in abundance, especially the rice, where the landlord keeps the reservoirs in tolerable repair, as in that case the crop seldom fails, and is generally more abundant than could be well expected. Where the reservoirs are neglected, the villages stand at great distances, and the ground, except in their immediate vicinity, whether high or low, is only cultivated occasionally, and with poor crops of pulse or linseed, that do not require watering.

North from the old bank of the Ganges, which would appear to have formerly run close to Bhojpur, Biloti, and Arah, and nearly bounded on the south by the great road from Patna to Vagsar (Buxar R.) which runs along the same bank, the whole country near the Ganges is regularly flooded; and, except just the villages and plantations situated on the highest spots, usually continues under water for four months. When the floods rise high, as they usually do two or three times every year, the water enters even into the plantations, but does no injury. Although it produces no rice nor sugar-cane, this is by far the most valuable part of the district; for the crops never fail. The river deposits a fine mould,

and scarcely ever covers a field with sand, as is usual farther down. When it retires, the country gets a very slight ploughing, and is sown with wheat, barley, pease, and other grains less common in Europe, which, without weeding, manure, or any other expense, produce with very great luxuriance, provided there is rain towards the end of October, to facilitate the ploughing. If this rain should be wanting, the crop may be a fourth less than when it assists the farmer's labour; but he is never left altogether destitute, as often happens in rice countries. The fertility, together with a ready market, the fondness of the Hindus for the sacred stream, a high assessment, and money rent, have notwithstanding its want of salubrity, rendered this the most populous and thriving part of the district. This favoured portion is called Hetha or lowlands, while the plains above the old bank of the Ganges are called Uparar or uplands.

RIVERS.—*River Karmanasa.* This is a torrent of considerable size, which receives many branches, and was for some time considered as the boundary of the British possessions in the north of India. Now it runs through the centre of their northern presidency. It is held by the Hindus in the utmost abhorrence, and no person of pure birth, who has come from a distance, will drink its water, nor even touch it; so that several poor people live by carrying the Hindoos across its channel, which in the dry season does not admit of a boat. On this account, Ahalya Bai, the widow of Holkar, attempted to build a bridge of stone, but the work was abandoned. No Brahmans live close to this hated stream; but many Sudras of pure birth reside on its banks, which in some parts are fertile; and these, finding the doctrine of its impurity very inconvenient, make no scruples either to drink or to touch its water. The reason assigned for the impurity of this river is as usual abundantly extravagant. There was in the family of the sun, in the twenty-fifth generation from Marichi, the common ancestor of that illustrious race, a certain Raja Trisangku or Satyabrata, who was a monstrous sinner, having murdered a Brahman, and married a step-mother. A good natured saint took compassion on this sinner, and removed all his impurity by collecting water from all the sacred streams in the world, and washing him in this powerful bath, which was made on the place

from whence the Karmanasa (deprived of virtue) has ever since flowed. This is near the village Sarodag, close by the southern side of the table land, among some stones above a rice field. The Karmanasa issues from a little fountain called Sarmanchuya, and immediately forms a fine rapid streamlet, which, notwithstanding its horrible impurity, is as clear as crystal. In this part of its course it never dries, and in the end of December, when I crossed it, fills many fine pools in its rocky channel, while the streams between are copious and rapid. Both abound in small fish. In this state it passes north-west about 12 miles, through the lands of the Turkan tribe of Kharwars. It then passes about five miles farther in the same direction, and there forms the boundary between the Kharwars belonging to this district, and those of Vijayagiri, who are in the district of Merzapur. The river then enters that district entirely; but, after a great sweep to the west, returns to the boundary, 11 miles north-west from where it entered Merzapur. There it receives a smaller torrent named the Gongroongt, which rises by two sources in the country of the Rajoyar tribe of Kharwars; and, coming from the east to the boundary of Merzapur, bends to the north-west along the limits of the two districts, for about eight miles, until it joins the Karmanasa.

After this junction, the Karmanasa runs northerly along the boundary for about two miles, when it is precipitated down an immense rock named Chhanpathar, at the extremity of a narrow recess called Karohar. The channel of the Karmanasa above the fall appeared to me to be about 300 feet wide, and the rock, over which it falls, may be 100 feet in perpendicular height. When I saw it in the end of February, the stream was inconsiderable.* The recess called Karohar Kho extends about five miles in length, and the river there continues to form the boundary between the two districts. The upper end of the recess is so narrow, as to be entirely filled by the channel, which in some places is filled from side to side with deep pools, so that the natives seldom, if ever attempt to reach the pool at the bottom of Chhanpathar. It is very large and deep, as I saw from above; and its water, although it appears green, is evidently

* In the rainy season the waterfall is very grand.—[Ed.]

very clear, as I could see the rocks in parts of the bottom. In the lower part of the glen there is some fine pasture for buffaloes; and the water, which continues to appear green from above, seems to be nearly stagnant, although in many parts it is deep. Immediately on leaving this glen the Karmanasa takes a very long sweep into the Merzapur district; but returns to the boundary about 14 miles nearly north from the mouth of Karohar Kho. In the end of February the Karmanasa there is in many parts dry, chiefly, I believe, where the bottom is sandy; but in general it passes through a rich clay, very retentive of moisture, into which it has sunk a deep channel, about 150 yards wide; and in such places it contains a little water, which, although nearly stagnant, is not dirty. From where the Karmanasa comes again to the boundary, it runs along that in a north-easterly direction for about 22 miles, leaving however on its left two small portions of this district, and then receives the Durgawati, a torrent rather more considerable than itself.

The source of the Durgawati or Durgauti is about seven miles east from that of the Karmanasa, and in this part of its course it is a rocky channel from 20 to 30 feet wide, containing in December many fine pools, and between them clear rapid streams somewhat larger than those of the Karmanasa. It runs nearly north for about nine miles, when it is precipitated down the rocky boundary of the table land into the head of a deep recess or glen named Kadhar Kho. There it is joined by three other torrents, that like itself rise on the table land of the Turkan Kharawars, and fall down the rocks at the head of the same glen. These three torrents are the Lohara, Hatiyadub and Korhas. The Lohara comes from the west, and rises near a village of the same name, where it issues from the sides of a rice field, by several small springs, which unite, and run east about eight miles to join the Durgawati. The Hatiyadub rises about half way between the source of the Karmanasa and that of the Durgawati, and is a torrent nearly similar, but rather smaller than the former.

The Karmanasa, after receiving the Durgawati, continues its course for eight miles towards the north-east forming the boundary between this district and Merzapur. The remainder of its course, about an equal distance, is entirely within the latter district; but just where it leaves the boundary it re-

ceives a small river, the Dharmauti, which for most of its course serves as the boundary between the circuits of Patna and Benares. About a mile before it joins the Karmanasa, the Dharmawati receives from the south another similar river named the Guriya; which arises in the east end of the division of Baraong, and has a course to the north by west of about 20 miles.

The Ganges, where it enters this district, is evidently a much less considerable river than in its passage along the district of the city of Patna, where it seems to be fully as large as in any part of its course: for the immense stream of the Kosi makes little apparent difference in the main body, and everywhere lower down many lateral branches exhaust all additional supplies, so that from the mouth of the Kosi downwards to the sea, the main channel continues gradually to diminish in width, although, as it approaches the level of the ocean, it contains more water, owing to a diminished rapidity of current. The channel of the Ganges in the western parts of this district, where it in general forms the boundary between Shahabad and Juanpur, is from a half to three-quarters of a mile wide; but the size and rapidity of the stream is in spring much less than at Patna, although it is no where fordable.

The Ganges, after receiving several rivers, is enlarged to the size which it holds at Patna; and its channel, even when uninterrupted by islands, is usually a mile wide. For about 25 miles to the mouth of the Son it forms the boundary between Shahabad and Sarun.

The Son for about 70 miles forms the boundary between the districts of Shahabad and Ramgar. It comes to this boundary from the west, and from its reaching this district, to where it receives the Kiyul from the Ramgar district, it seems to be no where above 1,000 yards wide, and no where less than 600. The rock of some small hills, in a few parts comes to the side of the river, but the channel is no where rocky. It consists of sand with a few pebbles intermixed. In the end of December the stream is 3 or 400 yards wide, but not rapid. It is pretty clear, and in most parts deep. It is then only fordable in two places, but in spring the fords are numerous. In the rainy season the Son is so rapid, that little use can be made of it for navigation. In the

dry season it scarcely admits boats of burthen to pass; but vast quantities of bamboos are then taken down in floats, which are pushed over the shoals. Below the mouth of the Kiyul, the channel of the Son is enlarged, and extends from about 600 to 2,000 yards in width. In the rainy season this immense extent is often filled; but this is only after great falls of rain, after which it subsides, and in 10 or 12 days becomes again fordable. This usually occurs three or four times in the season. Boats of 300 *mans* burthen can come up; but the passage is very tedious, for in the floods they cannot move, and, when the water falls, the stream is divided into many channels, after proceeding up one of which for miles the boatman finds it too shallow, and in order to find deeper water is obliged to return. Boats are therefore chiefly employed to carry down stones and lime; bamboos and timber are carried down in floats, while all other goods are conveyed by land. The other rivers and their branches are the Gupteswar, Yamsoti, Suura, Katane, Kukurnai, Kuhira, Parei, Karat, Kudura, Dhobra, Kasar, and Kao (all these flow into the Karamnasa or Durgawati); the Thongra, Kochani, Bhagar, Garatha, Chhenge, Bhas, Dewha, Tengrahanala, Ganggli, Bana, and Gubri, which flow into the Ganges; the Aosani and Guluriya Kho, which fall into the Son.*

THE CLIMATE is nearly similar to that of Behar and Patna; but instead of the wind changing four times a year, as at Patna, at Arah it changes but twice annually. From the middle of October to the middle of April, west winds are prevalent. From Rautasgar to Arah, along the Son, the wind blows every morning from the south; this and other observations confirming the idea expressed under Behar of the course of the wind following that of the great rivers. The winters are mild, but frost is sometimes complained of.

* Dr. Buchanan enters into a minute detail of these rivers too long to be given in this work.—[ED.]

CHAPTER II.

TOPOGRAPHY OF THE DIVISIONS AND HISTORICAL NOTICES.

The monuments of high antiquity in Shahabad, although numerous, are not to be compared in magnitude with those of Behar; nor would it appear to have ever been the fixed residence of any great Hindu monarch. During the Muhammedan government, it seems to have risen to more importance, and appears to have been designed by the last Pathan dynasty for the seat of their government, when that was overthrown by the Moguls.

It is universally agreed that Rohitaswa, a person of the family of the sun, resided here in the fortress called after his name, but vulgarly corrupted into Rautas. Harischandra, the father, and Trisangku, the grandfather of Rohitaswa, are said to have been kings of India, and the latter is said to have been here freed from many horrible sins, as mentioned in the account of the Karmanasa river; but there is no appearance that either king made this the seat of government; nor that Rohitaswa was ever a king, and he is always called the young prince (Kumar). Many persons of the families of the sun and moon, like their ancestors, Marichi and Atri, were Brahmans, and still more were petty chiefs contending for supremacy; and so far as I can judge from weighing the slender documents of Indian history, that have been brought to light, the succession seems to have been almost as badly arranged as among the Scottish princes descended from Heber and Heremon, who long held Ireland in the utmost anarchy. Rohitaswa is still invoked by the vulgar as the deity of the fortress, in which he resided; and it is alleged, that his image continued to be worshipped there, until destroyed by the zeal of Aurungzeb. He was therefore perhaps only a saint, a quality that has raised some of his descendants to the rank of gods; but it is not incompatible with his having been also a king; for Rama, his descendant in the thirty-first generation, was not only a king, but is now worshipped by a large proportion of the Brahmans and of their followers. Except the ruins of the temple, in which

Rohitaswa was worshipped, and which was probably built in times comparatively modern, I find among the ruins of this district no traces of this family. All the works in the fortress are still more modern, and their dates are well ascertained; but the tribe of Kharawars, who still occupy the table land, on which Rautasgar is situated, with many fastnesses of the south, claim a descent from the family of the sun, although this claim, on account of their impurity, is treated with the utmost contempt by their neighbours, who have adopted the laws of purity now in use.

Some ruins are attributed to a Varun Raja, who is said to have lived in the brazen age (Dwapar Yug); but the Pandit of the survey recollects no such person in legend, and the style of the ruins is quite the same with that of the monuments left by the Cheros.

The same may be said of another monument attributed to the same period, and to Ban Asur, often mentioned in the account of Dinajpur,* and considered here as a Dana or Daitya. These Daityas, although descended from a common parent (Kasyap) with the family of the sun, continued the decided enemies of these princes, as well as of the family of the moon. There can be little doubt, that the chief residence of Ban Raja was near Dinajpur; and although his dominions may have extended this length, the style of building so much resembles that of the Cheros, that I am inclined to consider the ruins as a work of that people. Another Daitya, named Karukh, of these remote times, is said to have had possession of the country between the Son and Karmanasa, which was then called Karukh Des. Few traces however remain of this personage, and some time afterwards a new name, Kikat, was applied to the country.

By far the most numerous monuments in this district, and, next to these already mentioned, allowed to be of the greatest antiquity, are attributed to the Cheros, to whom it universally admitted, that the whole country belonged in sovereignty. In the account of Behar, I have stated as a probable conjecture, that these were the princes of the Sunaka family, who governed in the time of Gautama, that is about the sixth or seventh centuries before the Christian

* See vol. ii. of this work.—[Ed.]

era. This conjecture may perhaps be considered as confirmed by the circumstance, that this district retains the ancient name Kikata, which according to the Desmata of the Sakti Sangam Tantra, extended from Charanadri (Chunar R) to Gridhra Kuta (Gidhaur). It is by many alleged, that the whole of Kikata in more modern times took the name of Magadha, from the Magas, who settled in its eastern parts; but this is here denied, and all the country west from the Son retains the name Kikata, which it anciently held, while the Magas from Sakadwip communicated their name to the eastern portions alone. The Cheros, therefore, I think, probably reigned before this change took place; and the portion of their ancient territories, which they retained, continued to be called by its old name. Several princes of both the great Indian families were called Sunaka, and it may be supposed, that the dynasty so called was descended from one of these persons, and in the account of Behar I have supposed them to have been a collateral branch of the Brihadrathas of the family of the moon; but the Cheros deny this pedigree, and claim the honour of being descended from the great serpent, who is king of hell (Patula), that is to say the devil, which is considered as a very ancient and honourable connection. Like the Daityas this serpent, being descended of Kasyap, is traced to a common origin with the family of the sun. As some of the Cheros remain in this district, I shall have occasion to return to their history, when I treat of them as a caste, and shall here only observe, that, although the monuments in this district attributed to them are numerous, none of them are to be compared in magnitude with Kabar or Budha Gaya, which were probably the abodes of the principal king. Those here seem to have belonged to subordinate chiefs, and some of these appear to have retained their territories long after the supreme kingdom had departed from their tribe. I found here an inscription, dated either in the 120th or 140th year of the era of Vikrama. The Pandit of the survey is not certain which date may be meant; but it is sure, that it must be the one or the other. The inscription mentions Phudi Chandra, king (Nripati) of men, and the tradition of the country universally calls him a Chero; but the Pandit, during a visit he made to Benares, was told by a person on the authority of the Kandarpa

Sanghita, composed by Varaha Mihira, that this Phudi Chandra was of the Sivira or Suir tribe, to whom the expulsion of the Cheros from this district is by most people attributed. Although Phudi Chandra claims the title of king of men, which implies, that he was a sovereign prince, it would not appear that his dominions were extensive, as the ruins of his house and temples, when compared with Giriyak, Kabar, or Baragang, are very small. It must be also observed, that the era is not called Sumvat 120, as is now usually done in all inscriptions meant to refer to the era of Vikrama; but is stated to be in the 120th year of Vikrama; and there is some reason to suspect, that, wherever the name Vikrama is expressed, it refers to a different era from what is in use, where the name is only implied, the latter era commencing 56 or 57 years before the birth of Christ, while the former would seem to commence in the year of our Lord 441. If the inscription refers to the latter era, it is in the A. D. 561; according to the former it would be in the A. D. 63. No mention is made of the Rajas tribe, and the ruins seem to me to be in the style of the Cheros, which is quite different from that of the Siviras.

Although it is generally mentioned by tradition that the Cheros of this district were subdued by a people called Sivira in the Sangskrita, and Suir in the Hindi dialect, yet in several places, and especially from the Cheros themselves, I heard the honour of this achievement attributed to a tribe called Hariho. None of this tribe now remain in this district; but I am told that the Raja of Haldivari in the district of Jaonpur, is a Hariho, and is allowed to be a pure Rajput, of the family of the moon, being descended of Haihaya, 11th in descent from Atri.

The Siviras seem to have been a powerful people; their government having extended not only over the whole of this district, but certainly over a great part, if not the whole of what became afterwards the province of Benares. At this city the Pandit of the survey was informed, on the authority above-mentioned, that the Siviras governed from the 421 to the 911 of Shalivahana, or from A. D. 500 to 990, when their Raja Phudi Chandra was destroyed by Jayadwa, a descendant of Bhoja of Dharanagar, who was no doubt the chief king in India; and persons of the same family with Jayadeva

are still very numerous in this district, and still have large estates. Many difficulties, however, attend this account, with which the date on the inscripton of Phudi Chandra can by no possible means be reconciled; and it is not liable to the suspicion of containing a grant of land. It is in general also alleged, that Raja Bhoja had no son, and that at the time of his death none of the Paramarkas being considered fit to be king, the son-in-law of Bhoja was placed on the throne. The Bhojpur Rajas of this district, now chiefs of the Paramarka tribe, indeed, deny these propositions; but they allege that Bhoja Baja in person came here, destroyed the Suir, and founded Bhojpur. The former I think probable, but I see no traces about old Bhojpur to indicate that it was the residence of such a powerful prince; although, as I shall afterwards have occasion to mention, the absence of this indication may he explained. The family alleges that Udayajit, the son of Bhoja, had two sons, Jagadeva and Ranadevar. In opposition to the Benares account, it is alleged that Jagadeva was made king of Gajjara, which went to his daughter, and that Bhojpur was given to Ranadevar as an appanage; but that he dying without issue, various low tribes rose and expelled the Paramarkas, and that they retired to Ujjayin near their former abode at Dharanagar, from whence they did not return until a Muhammedan king encouraged them to destroy the tribes of robbers by which the country was infested. According to the most probable legendary accounts mentioned by Major Wilford, (Asiatic Researches, vol, 9, p. 157), Bhoja Raja reigned from about the A. D. 918 to 969, and this date also contradicts the assertion of the Pandit to which I have above alluded. Mr. Bently, indeed, in his valuable treatise on Hindu chronology (Asiatic Researches, vol. 8, p. 243), brings the government of Bhoja lower; but in doing this he also depends on legendary stories, and although he proves that an author contemporary with Bhoja, continued to flourish until about A. D. 999, even that will not contradict the opinion of Major Wilford, which seems on many accounts to approach as near the truth as can be expected; for the author above alluded to, although he lived at the court of Bhoja, might have continued writing 30 years after this prince's death; nor is even that supposition required: Mr. Bently has only shown that the year

999 was near the time when the author (Kalidas) wrote, and a difference of 30 years in such cases is next to nothing. It was therefore probably between the years 918 and 969 that the Siviras were destroyed, and as Phudi Chandra was probably a Chero, they did not most likely commence their government until some time after A.D. 561; especially if we admit that the Cheros were destroyed by the Hariho tribe. The account given by the Raja of Bhojpur seems abundantly probable; and it is likely enough that on the death of Bhoja, the two grandsons of the king being absent on their estates, the son-in-law of that prince might seize on the government, as is usually stated that he did. Like the Cheros, the Siviras are considered by the present Brahmans as having been an impure and infidel tribe; they have in this district been entirely extirpated; but some, I am told, remain in Benares, and confirm the opinion of the Brahmans by eating pork and drinking strong liquors. There is no doubt, from their temples, that they were strenuous worshippers of Siva, and paid peculiar attention to Hanuman, the favourite of the great god. There is, however, great reason to think that the Brahmans are justified in considering them as heretics; for in one of their temples, attributed by the vulgar to Madan Pala, a Suir Raja, the Pandit found inscribed Magaradhaj yogi 700. Magaradhaj has exactly the same meaning with Madan, and the term yogi implies that he had assumed the order of yogi, the followers of Gorakshanatha, who altogether rejected the sacred order. Although the Siviras are considered by both learned and vulgar to be impure, the latter call them Suryabangsis, a name which it must be observed is usually claimed by the impure aboriginal tribes of the Vindhyan mountains. The carved ornaments and many images of the Suir are quite in a different style from any that I have before seen, and the latter seem to indicate a heterodoxy of opinion in those by whom they were worshipped.

The government of the Paramarka tribe of Rajputs, established in this district by Bhoja, according to the traditions of the family, which claims a common descent with that celebrated prince, and which seem well founded, did not last. He was succeeded as king by a son-in-law, Jayananda, who of course was of a different tribe; and on his death, without issue, A. D. 998, the Paramarkas, it is alleged, being weak,

the kingdom of India was entirely transferred to Chandra Pala, of the Tomara tribe. According to Major Wilford (Asiatic Researches, vol. ix., page 157), this prince died in A. D. 1002, leaving his kingdom to his son Mahendra Pala. Raya Sena, brother of this prince, built Delhi A. D. 1050 (A. R. ubi supra page 169), and founded a collateral dynasty of six princes, who governed the vicinity of that city. In the year 1170, Anagna Pala, the last of these kings of Delhi, adopted Pithaura Raja, the son of his daughter, and of the Chauhana tribe. Mahendra Pala, the chief king of India, at least in the north, seems to have been succeeded by Bhu Pala, who was king in A. D. 1027 (Asiatic Researches, vol ix. page 203). Several other princes of the same family, already often mentioned, succeeded, and they seem to have resided at Kanoj, not at Chandalgar, as I have supposed in the account of Behar; at least so I have been informed at Buddha, or proper (Nij) Kasi, where several monuments of these princes have been discovered, and where they often no doubt came as to the chief seat of religion and learning; nor at Chandalgar can any remains of these princes be traced.

During this space various tribes, partly Rajputs and partly Bhars, had expelled the Paramarkas from this district, and their descendants still continue to possess some estates, and are pretty numerous. In the best periods of native government such acts of violence were seldom considered as of any consequence to the state, and the kings were satisfied if the new occupants paid them the usual limited share of obedience.

Shortly before the final Muhammedan conquest, Jaya-chandra, King of Kanoj, of the Rathor tribe, assumed the title of King of India, having probably destroyed the direct line of the Pala kings. A dispute, concerning this title and other matters, with Raja Pithaura, grandson by a daughter of Anagna, the last of the Delhi branch of the Pala family, brought in the Muhammedans; and the overthrow of Pithaura, in 1192, and of Jaya-chandra, in 1194, placed these invaders in the sovereignty of India.

In the account of Behar, I have given an abstract of the history of this province during the Muhammedan government, and this will sufficiently explain the monuments erected in this district during that period. I have there noticed that, in A. D. 1266, the tribes, who had expelled from hence the

Paramarkas, had become so troublesome that forces were sent from the west to expel these banditti, by whom the roads were infested. It seems that on this occasion the king applied to the Paramarkas, and giving them some assistance, employed them to retake their former inheritance. It is to this era that I refer the foundation of Bhojpur, named after their ancestor Bhoja. They are still the chief proprietors in the district, as I shall have afterwards occasion to explain.

I have in the same account mentioned the history of Sher Shah, born in a private station at Shahusram, and afterwards king of India. He seems evidently to have intended his native country for the seat of empire, and chose as his citadel a strong position on the southern side of the table land. There, on a hill commanding a view of the utmost richness and magnificence, he erected a strong fortress, called after his own name, in which he deposited his family; for during his whole reign he seems to have been constantly employed in the most active pursuits. He is said to have been killed by the bursting of a gun at Goyaliyar. His son Selim was equally active. When he died, he is said to have been on the road to his native city, which he had nearly reached with a numerous army, the strength of the empire. His eldest son, Adil, had been left with a large force at Delhi; but the king was accompanied by two younger sons, who were mere lads. On his deathbed he recommended, that as an appanage these should receive the eastern provinces of the empire, and gave them in charge to their mother's brother. During the funeral, it is said, the young princes disappeared, and it is supposed that they were murdered, and buried in his tent, by their unnatural uncle, who, being at the head of the army, immediately assumed the title of king. The disputes between him and Adil weakened the Pathans, and the Mogul Humayun, who had been skulking on the frontier, immediately advanced to the east, and seems to have had little difficulty in resuming the government. He stained his conquest by the murder of the whole family of his adversary, whom he ordered to be thrown down the precipice, on which the fortress where they resided was built. The Moguls always affected to consider Sher as an usurper, although his claim to the government of India seems to have been fully as good as theirs. The writers who lived under the Moguls have not, of course, done justice

to the government of Sher and Selim, who, in whatever manner the former obtained power, seem to have been two of the ablest and best Muhammedan princes that have governed India.

Division under Thanna Arah.—The whole country is well planted and highly cultivated. The plantations consist chiefly of Mango and Mahuya trees, with a very few bamboos and palms, and such in general being the case in this district, need not be repeated. All to the north of the town belongs to the rich inundated land on the banks of the Ganges, which produces chiefly winter crops. To the south is some rice land, but the soil there is rather poor, and the trees are stunted. There are 50 houses of brick belonging to the natives, mostly in the town of Arah; 10 only have two stories, but these are good. There are 200 houses having mud walls and two stories, all of which are covered with tiles. All the huts have mud walls; one-fourth of them is covered with tiles, three-fourths are thatched. About 150 are in the shape of bee-hives, and belong to the impure tribe of Musahur. Except that there are no clay-walled castles, the villages here entirely resemble those of Behar, and the roofs are still more clumsy and defective, so that on a near approach they look most wretched, although at a distance they have often a picturesque and neat appearance. This latter remark extending throughout the district, need not be repeated. The town of Arah, which is the capital of the district, stands on an elevated space surrounded by creeks and land subject to inundation; so that the price of ground for building has become very high. It is supposed to contain 2,775 houses, with 8 people to each house. The buildings are in general mean, and, as usual, close huddled together, but some decent roads have been cut through the chaos of lanes, and form tolerable streets. The road from Patna to Vagsar passes through its whole length, and at the east end has on both sides a close built town. Towards its west end, on the north side, is an open lawn, in which are placed the court houses, the accommodation for the judge of circuit, and the houses of the judge and surgeon of the station, all buildings sufficiently commodious, but in no way ornamental. Two fine broad roads pass south at right angles to the west end of the Vagsar road, and about their middle are crossed at right angles by a third. This is the handsomest part of the town. There

are two or three small mosques and temples in good repair, but in no manner remarkable. Good roads, with abundant small bridges, surround the town in all directions for a little way, and are kept in very good order by the labour of the convicts. In the environs several of the natives have small gardens, in which they have collected a considerable variety of trees, and a good many flowers, and all around is very neatly cultivated and well watered; so that, although the plantations are not thriving, the trees being rather stunted, the vicinity looks uncommonly well.

The name Arah is said by the Pandits of the place to be properly Ara, and to be a corruption from Aranya, which in the Sangskrita signifies a waste. This name was given by the five sons of Pandu, the place then being a forest, where they performed several great works. In particular the Pandits allege, that it was here where the five brothers married Draupati. Such marriages are now totally illegal, nor could any one of these chiefs have now married this lady, as she was of the same family with themselves in the male line. This is only curious as it shows that the Hindu law has in modern times undergone great changes in other matters, as well as in the introduction of caste. It must be, however, observed, that this custom of several brothers having a common wife is still very prevalent among the Bhuddhists of Thibet. The Pandit of the survey doubts very much of Ara having been the scene of this marriage, and the derivation of the name from the Sangskrita seems exceedingly doubtful. In Persian the name is written Arah. The place is said to be also called Ekachakra, implying the people to live in unanimity, a virtue for which at present they have by no means the credit.

Babura is a small town containing about 250 houses; Gajarajgunj contains about 200; Ikhtiyarpur is nearly of the same size, as are also Amarapura, Berempur, Kailawar, Brukgunj and Sinaha; Tribhuvani and Pachane contain about 150; Bharsahar, or Amsahar, contains 100; as do likewise Mahai, Sakardihir, Guri, and Saraiya.

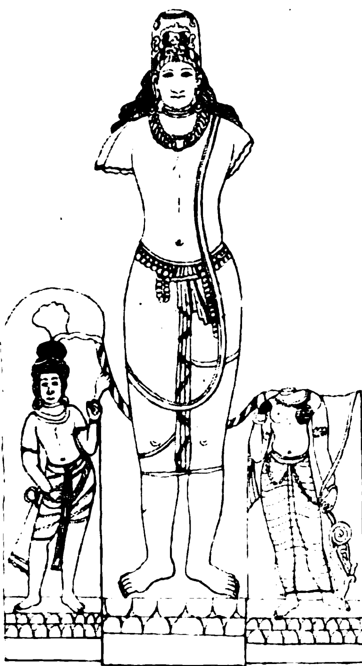
At a village called Masar, about six miles west, a little southerly from Arah, are some ruins and places of worship belonging both to the orthodox and heterodox, and the place has probably been dedicated to religion from a very remote

period. I shall therefore give an account of the present appearances. Immediately west from the village is a heap of bricks, extending about 50 yards every way, and still of considerable elevation. It is attributed by tradition to the Ban Asur mentioned in the historical notices. On the highest part I found projecting the head and shoulders of an image larger than the human size, and said to represent the infidel, on which account the people pelt it with bricks. The people are certainly afraid of this image; and on my proposing to dig it out, said that a man who had made the attempt had been punished for his temerity by a sudden death. The Rajput, to whom the village belongs, said that he would willingly take the bricks to build his house, were he not afraid of the consequences. On having it dug up, I found, as will appear by the drawing,* that it entirely resembles the images in Behar, which are called Vasudeva, or Lakshmi Narayan, and represents a prince standing between two attendants. This image, one of the most common in the temples of the Buddhists, may very likely represent Ban Asur, as is here alleged. In some places he is represented with a Lingga on his diadem, and Ban Asur is celebrated for the earnestness with which he worshipped that god. In others he has a Buddha in the same situation to denote that he followed the doctrine of these lawgivers. I have stated in the historical notices that the works at Musar seem to me, from their style, to have been erected by the Cheros; and in fact the people, although they call the large heap the house of Ban Asur, allege that long after his time the Cheros occupied the place. Ban Raja, indeed, according to common legend, lived in the end of the Dwaparyug, probably 1,000 or 1,100 years before the birth of Christ, four or five centuries before the commencement of the Cheros government, and 15 or 16 before they were finally deprived of power. If, however, Ban Asur was destroyed by the Grecians of Bactria (*Yavanas*), as is usually reported in legend, he must have been contemporary with the Cheros.

Near a very rude representation of the nine planets (*Navagraha*), was erected a slab, the chief figure on which is called Bhairav,* and represents a male with two arms,

* See plate 2, Shahabad.

1



Ban-Asur, at Masur

2

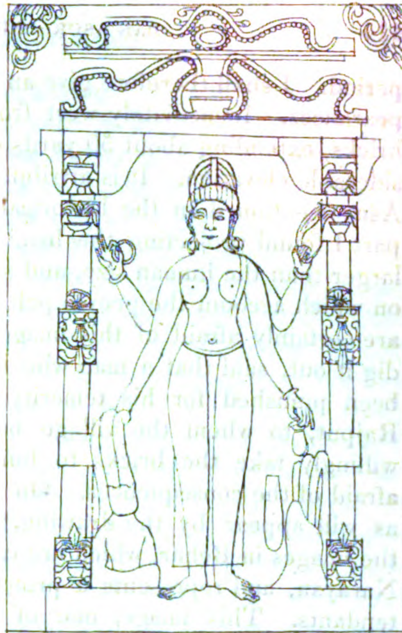


Image on the reverse of the Stone containing that called Bhairav, at Masar.

3



Mahamaya, at Masar

4



Bhairav or Narad, at Masar.

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J. Netherclift Lithog

standing, and crowned with a tiara. It differs a good deal from any image, that I have seen in Behar, and very much from those which were there called [illegible]. Some of my people call it Narsinh; but its representing this personage is exceedingly doubtful. On the reverse of this slab is a female figure, with four arms, to which no name has been given, nor can my people refer it with probability to any known deity. Beyond that I came to another Linga, like that called Gauri Sangkar. Although all the others are allowed occasional offerings (Pujah), the principal object of worship among the orthodox is the next in order. A Brahman priest (Pujari) is attached, covers the image with a cloth, and anoints it with oil. He calls it Mahamaya, or the great illusion, the wife of Siva; but it evidently represents the sphere of Brahma, as will appear from the drawing. On each side it has the Sun emergent, a common ladder or [illegible]. It is seated in the open air on a small terrace of brick, about four feet high. On this terrace have been placed some fragments both of single gods and groups. On each side is a figure exactly resembling Ban Asur, but called Chaturbhuj, from having four arms. They have, as usual in Behar, two angels hovering round their head, which was probably the case with Ban Asur, but that part of his image has been broken. Beyond this is a male figure with four arms standing by a female, and chucking her chin. This is called Krishna and Radha, but my people say, that it has the emblems of Har-Gauri. Beyond this together lie the most common fragments [illegible] is probably a temple of the god, the [illegible]. Under the door [illegible] is a figure entirely resembling [illegible] is called [illegible]. On the reverse of the slab is a common image of Brahma seated, with many ornaments round his head. [illegible] that most of the [illegible] here have [illegible] on each side, which I have no [illegible]. The principal figure on one of the slabs is generally much larger than that on the other, and the empty space above the smaller is filled with various fantastic ornaments. Except one small apartment the foundations of the [illegible] of the temple have been [illegible]; but nothing stood in this same place and is said to have been

standing, and crowned with a tiara. It differs a good deal from any image, that I have seen in Behar, and very much from those which were there called Bhairav. Some of my people call it Narad; but its representing this personage is exceedingly doubtful. On the reverse of this slab is a female figure, with four arms, to which no name has been given, nor can my people refer it with probability to any known deity. Beyond that I came to another Lingga, like that called Gauri Sangkar. Although all the others are allowed occasional offerings (Pindi), the principal object of worship among the orthodox came next in view. A Brahman priest (Pujari) is attached, covers the image with a cloth, and anoints it with oil. He calls it Mahamaya, or the great mother the wife of Siva; but it evidently represents the spouse of Brahma, as will appear from the drawing.* On each side it has the lion rampant, a common badge of Gautama. It is seated in the open air, on a small terrace of brick, about four feet high. On this terrace have been placed many fragments both of single gods and groups. On each side is a figure exactly resembling Ban Asur, but called Chaturbhuj, from having four arms. They have, as usual in Behar, two angels hovering round their head, which was probably the case with Ban Asur, but that part of his image has been broken. Beyond this is a male figure with four arms standing by a female, and chucking her chin. This is called Krishna and Radha, but my people say, that it has the emblems of Hargauri. Beyond this Sangker Lal, the chief merchant in Arah, is building a temple of his gods, the Jinas. Before the door, on a slab, is a figure entirely resembling Ban Asur, and those called Chaturbhuj; but this is called Krishna. On the reverse of the slab is a small image of Brahma seated, with many ornaments round his head. It must be observed, that most of the slabs here have figures on both sides, which I have no where else observed. The principal figure on one of the sides is generally much larger than that on the other, and the empty space above the smaller is filled with various fantastic ornaments. Except one small apartment the foundations alone of the new Jain temple have been erected; but another stood in the same place, and is said to have been

* See plate 2.

erected by Harji Mal, a merchant. In the chamber now built, are eight small images of the persons worshipped by the Jain, (see plate 9.) These are said to have formerly been placed in an equal number of chambers, and this will be the case in the new temple, when it it is completed. The date of the inscription on the seven images is Samvat 1443, and of those on the eighth image is 1449, that is, A. D. 1386 and 1392. The old temple was probably built about that period. In digging up the foundations of the old temple, and in search of materials from the heap, upon which it was placed, have been found many fragments and carved stones, which have been placed under a tree at the west-end of the ruin.

The principal figures that I noticed among these, were two like Ban Asur, a Ganesa, a female seated on a lion with a child on her knee, and one like that called Krishna and Radha. The material on which these images are cut, being stone from the mountains of this district, does not admit of such good workmanship as the indurated potstone or hornblende used in Behar, and the figures are therefore more rude than those of that district. What is called the house of Ban Asur, has evidently been a temple, and probably a solid one, like those most usual among the Buddhists. The original buildings near the tank have probably been accommodations for the priests, and round the great temple are traces of some smaller buildings, which probably had a similar destination.

Thanah Biloti.—This is a very long narrow jurisdiction, and a considerable portion situated beyond the Ganges. About one-half of the division north from Biloti, is of the utmost richness, and consists of the inundated land called Hetowar. South from Biloti, a great part of the country is covered with forest; and, even where that has been removed, a great deal of land is wasted on plantations of very little value. Trees therefore abound, while irrigation is much neglected; and in this part of the division want and other misery are very predominant. One of the greatest chiefs of the Paramarkas resides in this division at Jagadispur, near which he has very extensive domains. He resides in a castle built of mud and brick, abundantly large for a person of rank, but no way ornamental, nor at all suited either to the size of his estate, or to his high birth. There are four other houses of brick; 100 mud walled houses of two stories covered with

tiles, and 50 covered with thatch. The remaining dwellings are thatched huts, of which $\frac{5}{8}\frac{1}{2}$ parts have mud walls, and $\frac{1}{9}$ part walls of hurdles or reeds. The villages here resemble those of Arah.

Biloti, where the native officers of police reside, is a poor place containing only about 80 houses. Jagadispur is the chief town, for which it would be difficult to account, as it is surrounded by a forest, and by a country in a most wretched state of cultivation; but it contains about 1,000 houses. Bindhuliya, on the fertile bank of the Ganges, and a place of great commerce, contains only 500 houses; Bairiya contains as many, Sahapur, 400; Sahiya, 350; Ranisagar, 300; Mauyar, 250; Dulaur, 200; and Lalgunj, 150.

Dumraong.—More than a fifth part of the division consists of the rich low land on the side of the Ganges which is called Hetowar, and is most fully occupied. The remainder is a good deal neglected. Near Dumraong the land rises into considerable swells, and is rather poor; but, even where abundantly rich, much is allowed to be covered with forest reserved for sport, or wasted in plantations of very little use, and irrigation is too much neglected.

There are ten brick houses. That of the Raja of Bhojpur, the descendant of the Emperor Vikrama, is a very sorry structure. The original family seat was destroyed by Kasem Aly; and when Jaya Prakas (now Raja) succeeded, the estate was overwhelmed with debt, which this prudent and obliging person has been carefully liquidating. He has not, therefore, been able to attend sufficiently to the splendour of his residence; but is gradually making improvements. The fortification by which it was surrounded is entirely neglected. There are 800 mud-walled houses of two stories, 500 tiled, and 300 thatched, and some of the former are good and neat abodes. The huts have mud walls, 700 of them are tiled, $\frac{1}{16}$th thatched with stubble, and the remainder with grass. The villages resemble those in Arah. Dumraong, the residence of the Raja, and officers of police, surrounds the Raja's house on all sides, and may contain 1000 houses; but few of them are well built. Vagsar, including Sahanipati, Pangrepati, and Madingunj, contains 600 houses, and a branch of the Bhojpur family has there its residence. The fortress, built originally by one of his ancestors, is of little importance, although held by a small garrison, and strengthened by

some additional works constructed by European engineers. Simri contains 400 houses; Chaugai and Sapahi each 300; New Bhojpur and Kesat, 200 houses each (the former is very well built, and clean); Brahmapur, vulgo Barahampur, and Methila, 150; old Bhojpur and Saya have each 100.

The chief seat of Hindu worship in this division is Vagsar (Buxar R.), famous in modern times for a battle gained by Major Monro over the forces of the Mogul united to those of the Subahs of Ayodhya and Bengal, a battle which rendered the English in fact masters of India, had they then been prepared to avail themselves to the full extent of their fortune. Few places in India are more celebrated in legend than Vagsar, and none the least celebrated contains fewer or less interesting monuments of antiquity; nor is there any, the accounts concerning which are more contradictory.

Ekwari.—The soil of this division is in general light, and rather poor, so that without great pains bestowed on irrigation the crops will be scanty. This care has not been shown, and the country is in a wretched state. A great deal is overgrown with stunted woods, much has been lately deserted, and plantations of very little use occupy a large proportion, and are too extensive to be ornamental. There are three brick houses; $\frac{1}{16}$th houses consists of two stories, with mud walls, of which 600 may be tiled. A few Musahars live in round hovels, like bee-hives, with walls of hurdles. The remaining habitations are mud-walled huts, thatched with grass. The villages, except in being more miserable, resemble those of Arah.

Ekwari, which ought to be the residence of the officers of police, has no market, but contains 100 houses of cultivators; Sahar, where these officers reside, contains about 500 houses and some manufactures. Garini contains 250; Nagri, Sikarhata, and Piro, 200; Baga contains 150, as do also Paona, Barkagang, and Karat; Agango contains rather more than 100.

The only place of worship among the Hindus, and the only remain of antiquity worth notice, is called Deva Barnarak, or the place of Deva Barn, who is said on the spot to have been a Raja of the brazen age (Dwapar Yug); but his name, I am told by the Pandit of the survey, is not to be found in legend. Deva Barnarak is usually called Deo Punarak, and is situated about 10 miles west from Ekwari. The Raja is said to have

lived at Baraong, about six miles north from the temple; but I am informed that the ruins of his abode contain nothing remarkable. The village of Deo Punarak is small, and belongs to a Moslem free of rent; on three sides it is surrounded by a wide canal a good deal obliterated, but which about the middle of November still contains much water. The north side of the village is shut in by the temple, which is ruinous, but has no appearance of being so old as pretended, although its various parts seem of very different ages, and some parts may be of great antiquity and may have undergone various repairs and changes from different sects and persons. It occupies a square elevated terrace of considerable size, and surrounded by a wall of brick. East from the terrace is an old tank which may be 200 yards long by about 100 wide, from east to west. The gate of the temple faces this tank, or is at the east side of the terrace. Before it, towards the south, is a column, the most curious remain about the temple: it is quadrangular at the capital and base, and octagonal in the centre. On the base are four figures so much sunk in the ground that I could not make out their form. On the centre are eight figures, which notwithstanding their number, are called the (Navagraha) nine planets, and in fact the usual figure of Rahu is very distinguishable, but Ketu is wanting. Perhaps we may from this infer, that when this pillar was made, the planet Ketu had not been invented, although it is not impossible that the artist having only eight sides on his pillar, left out the unfortunate monster. On the capital are four figures; one riding on a winged person is called Krishna, a second riding on an elephant is called Indra, and a third riding on a buffalo is called Yama, the fourth is seated like the figures called Kuber in Gaya, and is here also called by that name. North from the gate has been a small detached shrine, which has fallen, and the image is lying on the ruins deprived of head and feet: it has represented a male in a standing posture, and with only two arms. The Pujuri, a Brahman of Sakudwip, has given this no name; he is indeed very unusually sparing in his nomenclature, and worships several that are still anonymous. In this he has shown prudence, as in the attempts which he has made at a new nomenclature, he has not been very successful. The gate has been a projecting building, through which you pass to the front of the chief shrine. This has not been

large, and the porch before it has been supported by only four columns, but these are more ornamented than is usual in Behar; the roof has fallen, and among the ruins are several images and fragments, said to have been mutilated by Kasam Aly. I observed four or five fragments of what is called Vasudeva in Behar, three of the kind called there Hargaori, and two Ganesas: these five the Pujari oils, and calls by the same names. The arch which supported the roof of the shrine is still entire, but most of the pyramid has fallen. The image is called the sun, but more resembles Vasudeva, and has no horses, the emblems of the great luminary. North from the above has been another pyramidal shrine, nearly as large, but it never has had a porch. The image is called Kumari, a goddess; but it is a male of a natural shape, standing with a flower in each hand, and a crown on his head. On the throne are some animals, which may have probably been intended to represent horses, and this figure therefore has more resemblance to the sun, than that to which the priest has given the name. East from the last mentioned old shrine, and south from the former, are two that are much smaller, have every appearance of being much more modern, and resemble somewhat a lantern in shape: one contains a female image of a natural shape, and in a standing posture; the other contains an image resembling those which in Gaya are called Hargauri. The priest gives neither a name, but he makes offerings to both, and to the latter especially at marriages. South also from the great shrine is a small one, very ruinous, but not unroofed: it contains a Siva Lingga, at present the chief object of worship. About 300 votaries assemble on the festival of the deity. At the south-east corner of the terrace has been a small chamber, now unroofed, but it contains several images. One resembles Hargauri, but a child in place of a lion is placed at the feet of the female; while the male, as usual, is attended by a bull. Another is Ganesa; a third, called Bhawani by the priest, is a fat male, like the Kuber of Gaya. He calls by the same name a female with four arms, seated on a lion. A fifth represents one of the hideous empty-bellied monsters pretty common in Behar, such as the Jaradeva of Rajagriha: this is seated on a human carcass, and has four arms. I suspect, that what in the account of Behar I have considered armour, is intended to represent bones, and that these monsters are intended for

skeletons, and the arms and head of this image have somewhat more that appearance than those usual in Behar: the priest calls it Kangkali. It must be observed, that at the Thanah, the best informed people attributed this temple to Kumardhir Sa, a Paramarka Rajput, who lived at Baraong about 150 years ago; and I think it probable that he may have given the whole some repair, and built the two small shrines that resemble lanterns; but the other parts are evidently of much greater antiquity. From the above account of the images it may be readily concluded that most of them belonged to the Cheros; but the pillar is not like any of their works, and may be older, although it has some resemblance to the works of the Siviras, by whom the Cheros were finally overcome. The conformity is however far from complete.

Karanggja.—The western part of this division consists chiefly of a rich clay, while its eastern end is rather poor and sandy; both are very much neglected, and a large proportion is occupied by stunted woods, or having been recently deserted, is only overgrown with long coarse grass. The plantations are too numerous either for use or ornament.

This division has five houses of brick, two of them at Suryapura, belonging to the family of the old Kanungoes, are very large; but owing to the usual want of windows, look exceedingly dismal, and are the very reverse in every respect of what good taste would dictate. There are also 50 mud walled houses of two stories, all covered with tiles. All the huts have mud walls, one-sixteenth covered with tiles, fifteen-sixteenths thatched with grass.

Karangju, where the office of police has been placed, is a small market place (*hat*) with only 70 houses.

Koyat is the largest town in this division, and contains 500 houses; Suryapura and Sivagunj, which are contiguous, contain 200, and Dayot contains about the same number; Dhangangi contains somewhat less; and Ghosiya has 150.

Baraong.—Like Karangja, the eastern part of this division, is rather poor and sandy; but the western part is mostly rich clay. The whole is better cultivated, and contains scarcely any woods. The central parts near Naukha are rather neglected, having not yet recovered from the desolation occasioned by the wars between Kasem Aly and the

Paramarkas. The face of the country in the middle parts of this division is finely diversified by some small rocks that project from the plain near Naukha. The space, which they occupy, is altogether inconsiderable, nor is their elevation great; but their rugged sterility is a fine contrast to the fertility of the plain, which comes to their roots; and the excellent materials which they afford for building would be of great value, were the country in a state of civilization, that admitted of the people being decently lodged; but such has never been the case. The western parts are not only by far the richest by nature; but are the best occupied, nor is much wasted there on useless plantations. There are, however, abundance of mangoes for use; but an addition of palms would contribute much to increase the beauty of the prospect.

At Naukha is a large rude castle of mud and brick, which belonged to Pahelwan Singha, the Paramarka chief, whose violence brought on the desolation of the country; and it is still occupied by his descendants, although mismanagement has very much reduced their estates. Although large, it is anything but an ornament to the country. There is only one other house of brick in the division. One hundred and twenty houses have mud walls and two stories; 100 of them are thatched, and 20 covered with tiles. All the huts have mud walls, 100 are tiled. All the others are thatched chiefly with grass, a very few only with stubble. The villages here are more ornamental than in the northern parts of the district, as many of them have small mud castles still occupied.

Baraong, where the officers of police reside, is a poor place, without any market, and contains only 30 houses; Naukha has 400; Harichar and Nasirygunj, which join, contain 300 houses; Barari, Kochas, and Rajput, 200 each; and Baghni and Balgang have each 100.

SHAHASRAM.*—The level country of this division is exceedingly beautiful, as the hills are everywhere in full view, rugged and perpendicular towards the summit, and finely wooded towards the bottom, while the plain is very fully occupied, and the plantations are sufficient for variety, but

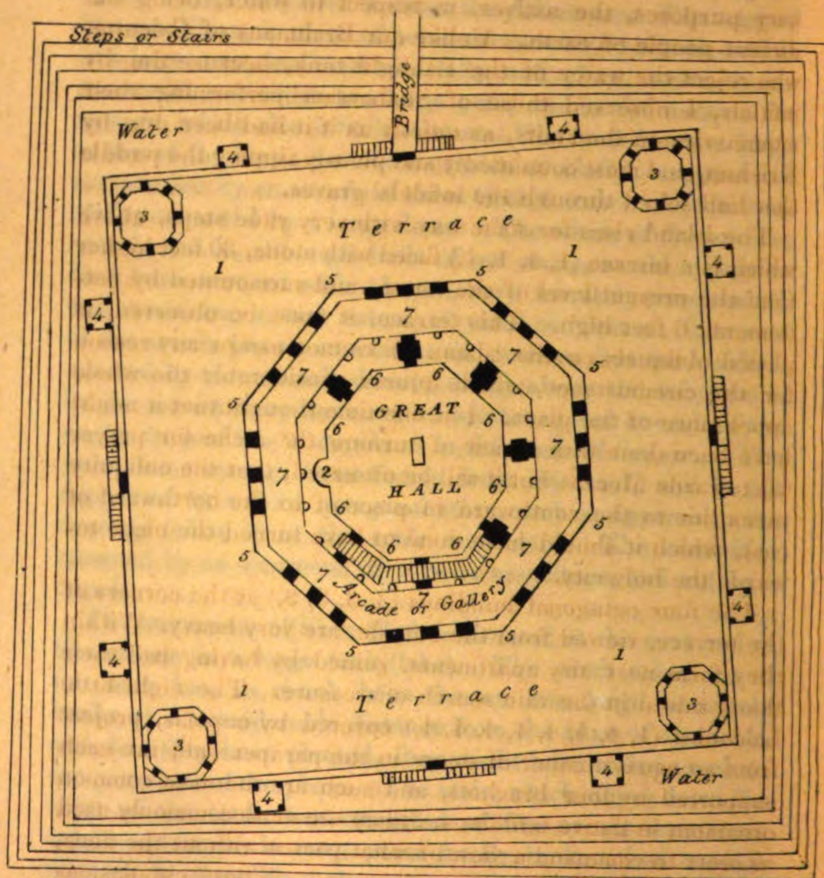
* Also Shahasram and Sasraong—signifies 1000 toys or play things, because a certain Asur who lived here had 1000 arms, and in each hand a different toy.

not so numerous as to satiate the eye. They are besides diversified with many palms. Near Shahasram also the tombs of Sher Shah's family add much to the beauty of the view. The approach indeed to this town from the north is uncommonly fine. The appearance of the table land in the southern part of the district, and of the recesses in its side, have been sufficiently described in the account of the hills and rivers. One hundred and twenty-five houses are brick and stone, 25 having their roofs terraced with plaster, while 100 are covered with tiles; 500 houses have two stories and mud walls, and are covered with tiles. All the huts have mud walls, 3000 are roofed with tiles, the remainder with grass. Shahasram is a considerable country town, estimated by the Darogah to contain about 3600 houses, very few of which are thatched:—some of brick or stone are pretty large. It is not much short of a mile in diameter each way, and is pretty closely built, on which account, and from the quantity of grain said to be consumed in it, I suspect, that the Darogah has underrated the number of houses. A few of the streets are tolerably wide, that is two carts might with some difficulty pass; and they are very rudely paved with stone. Some people keep the fronts of their houses, and the street opposite to them tolerably clean; but this is of very little avail, as more than two or three such people seldom live together, and their neighbours are involved in every species of nastiness. Most of the passages are as usual narrow crooked lanes. Besides the officers of police, Shahasram is the residence of a Tahasildar, who receives the revenue of the vicinity for the collector of Arah. Except a public bath, the keeper of which has an allowance from the E. I. Comp., all the public works have become ruinous. Besides Shahasram there are in this division the following small towns: Darihat and Raypurchor, each containing 250 houses; Jamuhar, Puhelyjah, Vangk, Murádabad, Chanari, and Alempur, each containing 200; Dhaodangr, containing 150; Khuremabad, about 185, and Akuri, 100.

Shahasram seems to have early become a Muhammedan town, and Huseyn Khan, a Pathan, who from his warlike manners was styled Sur, lived there about the time that the Mogul Babar usurped the government of India. The ruins of his house would seem from the size to show, that he was a

person of respectable though private rank. His son Sher became Emperor of India. In the middle of the town the son piously erected to his father's memory a very large monument, which is pretty entire. The style of this monument is exactly similar to that of the son, which will be fully described, and illustrated by drawings, and these may serve for both. I shall only here mention the differences. The tomb of Huseyn Khan, in place of being surrounded by a tank, stands in a large area, enclosed by a lofty wall of cut stone, in the eastern face of which is a large gate, and in the western the mosque, which also is built of stone. The tomb is not so large as that of the king; but like it consists of a lofty octagonal hall surrounded by an arcade of three Gothic arches on each side, and surmounted by a large dome. The whole of the arcade, outside and in, although built of cut stone, would appear to have been covered with plaster, very minutely ornamented, and containing a vast extent of pious sentences. The roof of the arcade has no cupolas at the corners, but each side is covered by three small domes, rising above the balustrade. In the second story there are no windows; but at each of the angles its roof has a cupola as in the tomb of the son. The great dome springs immediately from this roof, and is not supported by a third octagonal story, such as appears in the drawing (plate 2) of the son's monument. The summit is crowned by an ornament of various mouldings, and not by a cupola.

The monument of Sher Shah is situated at the west end of Shahasram in a large tank (lake). The earth taken out of the tank has, as usual, been thrown into large unseemly banks at a considerable distance from the edge of the tank, and, had they been planted, they might have added much to the grandeur of the place. The stair, which slopes down the sides of the tank, has consisted of five or six monstrous misshapen steps, in most parts totally broken, but enough remains to show that they never have been well cut nor built, and they are out of all reach of convenient dimension; otherwise this part of the work would have been very grand and beautiful. From the north side of the stair a bridge led into the island, on which the tomb stands; but, luckily for the monument, the bridge has fallen; so that access is difficult, nor can the materials be conveyed away for building.



For Sher Shah's Tomb. Pl. II. – see Drawing facing Dedication.

London 1838. W.H. Allen & Co. 7, Leadenhall St.

The only access now is by a raft made of earthen pots, and this is only constructed when strangers from curiosity visit the place. The water of the tank is very dirty, owing to all manner of men and beasts frequenting it to wash themselves and clothes. Were it not for this, I believe it would be clean and good. As it is, all classes use it both for drink and culinary purposes, the natives, in respect to water, being the dirtiest people on earth. Unlike our Brahmans of Calcutta, who reject the water of the Laldighi tank, because dug by infidels, I observed those of Shahasram performing their mummeries on the stairs, as quietly as if it had been dug by Krishna, and most contentedly and piously sipping the puddle that had soked through the infidels' graves.

The island rises for some way with very rude steps, above which is a terrace (1, 1, 1, 1,) faced with stone, 30 feet higher than the present level of the water, and surmounted by battlements 6 feet high. This terrace, it must be observed, is placed obliquely on the island. I cannot assign any reason for the circumstance, which injures considerably the whole appearance of the place. I at one time thought that it might have been done with a view of turning the niche for prayer (2) towards Mecca; but it will be observed, that the obliquity turns this to the southward in place of to the northward of east, which it should have done to have turned the niche towards the holy city.

The four octagonal buildings (3, 3, 3, 3,) at the corners of the terrace, viewed from the outside, are very heavy. Within they form neat airy apartments, ruined by having had their floors raised in the vain search of treasure. The eight little balconies (4, 4, 4, 4, 4, 4, 4, 4,) covered by cupolas, project from an equal number of doors in the parapet wall, are each supported by four brackets, and such are the most common ornament in native buildings. They are most commonly used as seats to command a view of what passes without the dens, where the natives of rank are immured. These cupolas, as most usual, are supported by four columns. The tomb itself (5) consists of a great hall (6) surrounded by an arcade forming a gallery (7). Each side of the octagon has, in front, three Gothic arches (No. 2, a), the separate drawing of one of which will give a sufficient idea of their structure. The roof of each side of this gallery, consisting of three alcoves, is

supported by four Gothic arches, above which and the alcoves is a level terrace forming the first stage of the building. The total height of this first stage is about 35 feet 8 inches, including 18 inches for the basement under the arches, and 6 feet 4 inches for a very heavy balustrade and parapet, that rise above the level of the roof. Under this balustrade is, as usual in native buildings, a cornice of slabs sloping downwards, and supported by brackets (9). The terrace on the roof of this first stage is 15 feet wide, and at each corner has a small cupola supported by six rude columns of five sides. The floors of these cupolas, being 18 inches above the terrace, interrupt the walk, which would be otherwise very grand, although the balustrade is too high; but the openings in it afford noble views of the country. Above this terrace the outside of the building rises in a second octagonal stage about 25 feet high, reckoning from the terrace of the first stage to that of the second stage. This second stage consists of a plain wall with a small cornice, surmounted by a low parapet. At each angle, and in the middle of each side, is a small window, the outside view of one of which is given at d, plate 2. This terrace, including the parapet, is 9 feet 10 inches wide, and has at each corner a cupola similar to those below; but two of them (11) are disfigured by having to one side projections of four pillars to support a roof that covers a small door, by which the stair turns upon the terrace. These stairs are altogether wretched. Those for ascending the first story begin from the sides of two of the doors, which lead from the gallery into the central hall, and ascend in the thickness of the wall to two of the windows. Those leading up the second story begin in two other windows, and ascend in the same manner, but turn upon the second terrace by two small doors. They are narrow, steep, dark, and rough. Why they were not made to open into one of the cupolas it would be difficult to say, unless we suppose that the workmen wanted skill to form the necessary calculations.

Above this second stage the outside of the building rises perpendicularly with a third stage of 16 sides, and 11 feet high. This has a small cornice, and a kind of false balustrade, from which the dome rises, and is nearly hemispherical. On its summit is a small cupola supported by four pillars.

To proceed to the interior of the building, which at the base is an octagon of 54 feet the side, the thickness of the outer wall is 6 feet, and the gallery is 10 feet wide. Each of the inner sides of the gallery is divided into three, by an equal number of arches. In the central arch of seven of the sides is a door, represented at plate No. 2, b, which will give a sufficient idea of the style of this part of the building. In the two lateral arches of these seven sides, and in all the three of the sides farthest west, are only simple niches.

The inner wall, bounding the central hall, at the ground is 15 feet thick, and on the inside forms an octagon 41 feet 4 inches a side. The seven doors in the seven sides, as seen from within, are represented in the plate No. 2, c. The side farthest west is the place for prayer, marked by a niche a good deal carved, and surrounded by pious sentences. In the centre of it is written Allah, the revered name of God, which stands alone in many other places of the buildings.

The great hall ascends, as a very plain octagon, for about 27 feet, that is to the level of the terrace above the first stage on the outside of the building. There it has a small rude cornice, and divides into 16 sides, in each of which is one of the windows, 6½ feet high, 4 feet wide, and shut with fret work in stone, as represented in plate No. 2, e. The wall ascends with 16 sides for about 25 feet, when by rude mouldings it is sub-divided into 32, and ascends thus 11 feet farther, when the dome commences. In the centre of the dome, and from each of the three alcoves in each side of the gallery, are remains of chains, from whence probably lamps were hung.

The grave of the king lies in the centre of the hall, opposite to the niche for prayer, with the right hand towards the sacred city. The grave is raised about six inches from the floor, and like it consists of plaster. It is distinguished from many others by a small column placed at the head. The others are said to belong to favourite officers, and are disposed in two rows at their master's feet.

The inside of the tomb is sufficiently ventilated and lighted, and in such a building heaviness does not displease; but the attempts at ornament are in the very worst taste, and are rudely executed. Had the walls being perfectly plain, they would have had a better effect; a few simple but neat cor-

nices, with well formed doors and windows, and good masonry, would have rendered the whole grand and solemn; but here, as usual in native masonry, the workmanship is rude; the stones are not placed in regular rows, one is thick, the next one thin, and a third is cut like a dove-tail, in order to fill up the vacuity; some are laid on their sides, some on their ends, so that even in the mere disposition of the stones no regard is paid to symmetry, which produces not only a bad effect, but tends to weaken the building. In the drawing of the doors (plate 2, a b) the actual joinings of the stones have been faithfully represented, which would show the the rickety structure of the arch most usual among the natives, and the still more defective plan of a door supported by brackets, which is not less commonly employed.

The outside of this building is still more defective than the inside, and an attempt at more ornament, with an equal heaviness of design, and rudeness of execution, have rendered its defects more glaring. To crown the bad taste of the whole, the entablatures, balustrades and parapets of the whole outerside have been painted with the most gaudy and glaring colours, laid on plaster like a kind of enamel, and covered with stiff tinsel flowers. Time has indeed removed most of the paint, and has so far favoured the appearance of the ruin; for the building must now be considered as such, and has just arrived at the stage, when its decay will be rapid. It has hitherto suffered little dilapidation, and the inner wall and arch of the dome are perfectly entire; but wild fig-trees have taken root on all the exterior parts, and have already overthrown several of the smaller buildings. This is to be regretted, as notwithstanding all its defects, the tomb is a magnificent work, and fit for the sepulchre of a mighty prince. There can be no doubt that Sher Shah left an endowment for the support of his tomb; but the Moguls, who strangely affected to consider him as an usurper, have had the meanness to resume the grant, and ever since their authority was established the place has been totally neglected.

About half a mile north-west from the tomb of Sher Shah is that of his son Selim. It has never been finished, the Moguls, soon after his death, having seized on the empire. The plan intended has been nearly similar to that adopted by his father; for no doubt both princes had commenced their

tombs during their life. The tomb of the son also would have consisted of an island in a tank, with a bridge, and a large octagonal hall covered by a dome, and surrounded by a gallery with three arches in each front. The building has been carried to the height of from 10 to 15 feet, some of the arches having been turned, others not. I observed the following differences in the plan, and some of them are evident improvements. The banks thrown out in digging the tank have been removed to a greater distance, and have been sloped gradually towards the stair, although left very abrupt towards the country. The view from within is not therefore so dismal. The bridge is entire, and enters from the south. It has 11 small passages for the water, which are not arched, but covered by stone beams laid from abutment to abutment. Ten small balconies project from each side above the abutments, and would have been covered with an equal number of small cupolas.

The island has not the obliquity that deforms the monument of Sher Shah, and each side rises about 8 or 10 feet above the water, with a stair extending its whole length. At each corner an octagonal projection, like a bastion, is connected to the island by a narrow gorge of some length; and on these no doubt four octagonal buildings, as in the father's monument, would have been erected. The island from the stair rises on every side gradually towards the tomb, which would have thus been shown from top to bottom. The building would have been nearly of the same size with the tomb of the father; but at each corner would have had a minaret, which would probably have superseded the miserable cupola on the terrace covering the first stage of the building, and have had a good effect. The niche for prayer is not so much ornamented as in the father's monument, and there is on it no writing except the name of God in the centre, and this is repeated in many parts of the building. The grave, which occupies the centre of the building, is undoubtedly that of Selim. On his left is another, nearly of the same size; but whether that of his son Selim, or of a wife, I cannot say, not having at the time learned to distinguish between the grave of a male and that of a female Muhammedan. At their feet are five smaller graves, of unequal sizes, such as may be supposed suited for a growing family of children. These seven graves are surrounded by a wall about seven feet high,

and rudely built of rough stones and clay. The body of S elimwas probably deposited here in great state, to wait for the finishing of the tomb. It is probable that on the murder of the family, the children have been brought here by some faithful servant, and surrounded by a wall to exclude wild beasts.

The appearance of Shergar (which is situate amidst the most magnificent scenery, and adjacent to one of the richest plains in the world) from below is much superior to that of Rautas, as the top of the rock all round is crowned with a rampart, strengthened by numerous bastions and bulwarks. These now indeed are ruinous, but they make a considerable show, while the works of Rautas are scarcely to be discerned, except on a near approach, and are confined to a few parts of the hill. The ascent to the principal gate on the north has also been much grander than any of the approaches to Rautas, and has been a broad but irregular stair, winding with short zig-zags, and much easier than is usual in native buildings, although very inferior to what any ordinary mason in Europe would propose to construct. The accommodations for the ladies form a long castle on the summit of the small hill on the south side of the fort, and when viewed from the north side, have a grand appearance, somewhat like the castle of Durham.

TILOTHU.—The part of this division which contains any considerable number of inhabitants is a strip along the bank of the Son, about 48 miles in length, and from 1 to 5 miles wide. The narrow level on the Son, were it better cultivated would be extremely beautiful, especially in the rainy season, when the immense torrent is filled, as then hills, woods, water and fertility would unite to complete the scene; but the country is much neglected. The woods are more extensive than is required, and the country on the bank of the Son overwhelmed with useless plantations, containing little or no variety of trees.

There are 10 brick houses, one of which, belonging to the proprietors of Tilothu, is the best lighted native house that I have seen, having as many windows as if it had been built by an European. It was only designed for public occasions; the dwelling-house was poor, and, as usual, shut up by high mud walls. There are 75 mud-walled houses of two stories, 50 of which are tiled, and 25 thatched. The walls of all the

huts on the table land are constructed of hurdles, of all on the plain of mud. Of the latter one in 32 may be tiled.

Tilothu, including Aurungabad, in which the office of police is situated, is a good country town, containing 700 houses, few of which are thatched. Among them are most of those of brick or of two stories. Many of these last are very large, and belong to Muhammedan merchants, who round the town have formed very extensive plantations of mangoes, in which are some neat tombs and small places of worship. The Imamvari, dedicated to the memory of the grandsons of the prophet, is a very neat place. Akbarpur contains 200 houses, Daranagar 150, and Maharajgunj 100.

Where the Tutrahi, a branch of the Kudra river, falls down the hills near Tilothu, is a holy place sacred to the goddess Totala. The recess into which this stream falls is about half a mile deep, and terminates in a magnificent abrupt rock, somewhat in the shape of a horse-shoe, and from 180 to 250 feet high. In the centre is a deep pool, at all times filled with water, and which receives the stream as it falls from a gap in this immense precipice. The gap may be 30 feet wide, and the perpendicular height there, I conjecture, may be 180 feet. The rock is not exactly perpendicular. For about 60 feet from the pool, or one-third of the height, it inclines backwards at an angle of about 100 or 105 with the horizon, and the ascent to that is formed like stairs by the horizontal strata of which the rock consists. Above that it overhangs, so that the water falling over reaches nearly the edge of the pool. The image* (13) is said to have been placed there by the Cheros, about 18 centuries ago, and in fact resembles one of the images very common in the works attributed to that people in Behar; but this antiquity is by no means confirmed by the inscription, the date of which is evidently in Samvat 1389, or A. D. 1332; but the Pandit of the mission does not understand the remainder, although it is abundantly legible. This image indeed would not appear to have been that originally worshipped, and in the year 1332 has probably been taken from some ruin, and placed here; for on another it is said that the Guru of a neighbouring prince, Pratapa Dhavala, had in 1158 made the image of

* See plate 9, Shahabad.

the goddess, alluding evidently to a rude female figure carved on the rock, and now totally neglected. This image now worshipped is, as usual, a slab carved in relief, and represents a female with many arms killing a man springing from the neck of a buffalo. It is placed on the highest ledge of the sloping part of the rock, immediately under the waterfall, and from 200 to 300 votaries at different times, in the month Sravan, go to the place to pray. There is no Pujari.

The principal remain of antiquity in this division is Rautasgar, which, as I have said, derives its name from the young prince Rohitaswa, the son of Harischandra, a king of the family of the sun in the most remote periods of Hindu legend. Whether or not Rohitaswa resided there, may be doubted; but his image, there can be little doubt, continued to be worshipped in the fortress until destroyed by the zeal of Aurungzeb; such, at least, is the general tradition, and all the circumstances are highly probable. I have learned nothing of the persons who held Rautasgar from the time of the son of Harischandra until the 12th century of the Christian era, when it seems to have belonged to Pratapa Dhavala, father of the last Hindu emperor; and it continued for some time subject to his descendants, as has been already explained. The usual tradition is, that it first fell under the Muhammedan yoke in the time of Sher Shah, A.D. 1539. Immediately on obtaining possession, he seems to have set about strengthening the place; but the works which he commenced were abandoned after small progress having been made, owing to his having discovered a situation which he considered more favourable, and where he erected Shergar, as already described. When Man Singha was appointed viceroy of Behar and Bengal, he selected Rautas as a place of safety for his treasures and family, and it would from tradition appear that almost the whole buildings now on the place were erected by that powerful chief, and this is confirmed by two inscriptions in Sangskrita and Persian, on the two principal works, the palace and Kathotiya gate. From these it would appear that these works were finished in the year 1654 (A.D. 1597), that is, in 10 years after he procured the government. After his death, the fortress was annexed to the office of Vazir of the empire, by whom the governors were appointed. In 1644 (A.D.), when Shah Jehan rebelled against his father, the

governor received the family of the prince, and protected them until pardon was granted.

The fort was under the authority of an officer called Kelahdar, to whom for the maintenance of the whole expense were assigned the estates *(pergunahs)*, named Chayanpur, Shahasram, Kera, Monggaraur, Siris, Kutumba, Dugul, Charganga, Japila, Belonja, Vijayagar, Ekbarpur, Tilothu, and Palamu, partly in this district, partly in Ramgar, and partly in Mirzapur. These estates were managed for the Kelahdar by a Dewan, who, although a mere penman, seems to have had considerable authority in the fort, having the entire confidence of the chief. The Kelahdar had usually a guard of 400 or 500 men attached to his own person, and changed when he was removed. The regular military establishment of the garrison was under the command of an officer named Hazari, from his commanding 1,000 men. The office was hereditary, and held by a family originally Rajputs, but now Muhammedans, and it was from Keramut Khan, the son of the last person who held this office, and from the agent of the last Dewan, both intelligent polite men, that I took my account. The 1000 men under the Hazari were natives of the fortress, and their families occupied a small town near the palace. They served as artillerymen, and being inured to the climate, were the part of the garrison on whose exertions most reliance would be placed. Besides these, two Rusalahs of matchlock-men, each containing about 2000, were usually stationed in the place, and were sometimes augmented, and regularly relieved, as in the rainy season strangers suffered much from the climate. These were under their own officers, and were stationed at different parts of the extensive table land contained in the garrison.

Kasem Aly, the viceroy of Bengal and Behar, contrary to the rules of the empire, obtained this fortress from Aly Gohar. The Kelahdar was then absent, and his Dewan Shah Mal refused to comply with the royal order. He was, however, unable to secure the place for Suja Ud-dowlah, the Vazir, to whom it of right belonged, and was put in irons by Nisar Aly, who was appointed Kelahdar. After Kasem Aly's lines at Uduyanala were forced, he became anxious for the safety of his family and treasure, and was advised to send them to Rautas. His wife, with 1,700 other women and the treasure, were ac-

cordingly sent to that place under charge of Lala Nobut Rai, who soon died; and the Kelahdar being with the viceroy, the charge was transferred to Shah Mal, the Dewan, who had previously been in irons; but he seems to have acted with honour and fidelity. When Kasem Aly was finally defeated at Vagsar (Buxar), the Dewan sent the chief wife of the viceroy to join him, and she took with her all the gold and jewels; the silver was too heavy for carriage. Kasem Aly, who was very much irritated by some part of Suja Ud-Dowlah's conduct immediately after the battle at Vagsar, wrote to the Dewan, recommending him to deliver up the fortress to the English; so that, some time after the battle, when Colonel Goddard arrived, no resistance was made. The Colonel assembled the garrison, offered to retain such as chose, and desired the others to return to their respective homes. The women were allowed to go where they pleased, with whatever effects they had. One of them was an European, and put herself under the protection of Mrs. Goddard. Most of the others went to Moorshedabad, but their number had been much reduced by sickness. The Colonel remained in the fort for two months, destroying all the military stores, and a small guard continued for about a year, when the place was totally abandoned; and all the merchants and artificers, having no further employment, retired. The place was then in perfect repair, only the women's apartments in the palace, being unable to contain such a number as Kasem Aly sent, almost the whole building had been appropriated for their reception, and had been much disfigured by temporary walls of clay and rough stone run up in haste, in order to procure the concealment considered necessary. These still remain, and occasion some difficulty in tracing the proper form; but, although a space of between 50 and 60 years has occasioned much ruin, the whole form of every part may still be traced, and I made a full plan of the palace (*mahal*), as access to such buildings, while they are occupied, cannot be procured, and as this was designed for a family of the highest distinction in the Mogul empire, and accommodated a prince, when it was at the utmost height of splendour. I now proceed to describe what remains of the fortress.

This occupies a part of the table land, about four miles from east to west, and five miles from north to south; but

among the natives it is usually reckoned 28 miles round, and following the windings of the hill, it may be so. The area is very hilly, and much of the surface consists of bare rock; but there is a good deal of a fine red soil, which might be cultivated, and contains many fine trees. A little also is fit for rice, and by the Kelahdars was usually cultivated with that grain, not that any resource could ever be afforded to the garrison from the cultivation of the soil, farther than a supply of fruit, garden stuff, and of some pasture; but as usual the cultivation was carried on in order to save the conscience of the Kelahdar, when he described the importance of his charge in the common manner of Oriental exaggeration. A deep and wide recess, called Kariyari Kho, separates this part of the table land, from that to the north, and a branch of this recess, named Guluriya Kho, separates it from the table land to the west, leaving only between its south end and the rock, that overhangs the Son, a rocky neck about 200 yards wide. The two sides of this neck are perpendicular, and the sides of the whole circumference are not only everywhere exceedingly steep, but in most places have in some part of their height a perpendicular rock of from 50 to 150 feet high. No less than 83 passages, besides the neck, are accessible to men. Three of these and the neck are called the four great Ghats, while 80 of more difficult access are called Ghatis. Although every one of these has been more or less fortified, and some of them very strongly; yet it is evident, that such a place must have always been liable to surprise, especially with a native garrison, defective both in discipline and vigilance. Rajaghat, towards the south, which is the easiest ascent, is a very steep and long hill; and even there it has been necessary, for a very considerable way, to ascend a perpendicular rock by means of a stair. The works even there are numerous, and strong; and, being scarcely visible from below, in all probability could have been little affected by cannon. The vulnerable part of the fortress is indeed the neck, by which it is joined to the table land, and called Kathotiya. So far as can be judged from what remains, it would appear, that the Hindus at the other places had trusted entirely, or in a great measure, to the natural strength of the place; but across the neck a wide ditch has been dug into the solid rock, and this

is said to have been done by the Hindus. According to tradition it was intended to have made this ditch very deep, even to the level of the plain; but, when a little had been dug, blood issued from a stone, and the work was abandoned. The work has indeed every appearance of unfinished rudeness, and the stone from whence the blood came, is as usual shown, and was an object of worship, so long as the Hindus held the place. The neighbouring peasants still occasionally bestow on it a little red lead, and consider it as the power protecting Rautas. On the east side of this ditch Man Singha erected most stupendous works, which, when viewed from the west, appear very magnificent, and I think exceed any castle that I have seen. Two fine gates, one about 30 yards within the other, defend the north side of the neck, which is low and level, and attached to each are many winding passages, bulwarks, and half moons, while both they and the ditch are commanded by a double line of square bulwarks, half moons, and curtains, with fine battlements, which rise along a low hill that occupies the south side of the neck, and tower 60 or 70 feet above the ditch and recesses, for about 400 yards in extent. A near view is not at all favourable. The access to the different works, and the communications between them are exceedingly difficult. The walls are not thick, and the masonry has all the defects of the buildings at Sahasram. Although it is said, that there was in the fortress a great many guns, it does not appear to me that these works were fitted for receiving them. The embrasures seem to have been fitted for arrows or musketry, although there are a few holes, perhaps a foot square, through which small cannon may have been thrust. These works were still less calculated to resist the attack of modern warfare. They are completely commanded by a rising ground within 200 yards to the west, a few guns placed on which would no doubt knock down the lofty works, and fill the ditch. In the time of Man Singha we may therefore safely infer, that cannon were little used in sieges, whatever the flattery of Abul Fazil may assert. At the east end of the same neck is another line of works, called the Lal Darwajah or red gate, from the colour of some of the stones with which it is built. The works there are comparatively trifling. I need not describe the other fortifications, all of which are inferior to these at

Kathotiya; and any one of them being carried would render the others of no use, for there is no citadel. The works, which Sher Shah commenced, seem indeed to have been intended for such, and would have occupied a square space along the south side of the hill, including most of the places in which water is found, so that had an enemy carried the ascent, he would not have been able to besiege the citadel from a want of drink. The south face of this citadel would have been defended by the natural precipices of the rock towards the Son. Some progress had been made on the ramparts facing the east and north, but that towards the west had not been commenced, when the work was abandoned. The only part finished is a tomb for the superintendent (Darogah) of the works, who is said to have been an Abyssinian slave; but he probably continued governor of the place long after the works were relinquished, and is said to have founded a school (Madressa), some remains of which, and a small mosque are shown. His tomb much resembles that of Sher Shah's father, but is much smaller. It is still very entire. None of the works make any show from below, nor would any one in passing, imagine that such a barren dismal rock was either a fortress, or contained so many great buildings.

I now proceed to describe the works that were defended by these fortificatious:—Very little indeed remains that can be attributed to the Hindus. Near the palace are three old tanks called after Ben Raja, Gaur Paja, and Chandrabhan, Many think that these were three persons of the same family, by caste Brahmans (probably of the military kind), and that it was from Chandrabhan that Sher Shah took the place. This is by no means confirmed by the inscription at Bandu ghat; but it is perhaps not altogether invalidated by that monument, for the 345 years intervening between the death of Jaya Chandra and the capture of Rautasgar by Sher Shah, will not only admit of the 12 governors mentioned in the inscriptions, but of these three Brahmans. The silence, however, of the inscription concerning these persons, while it goes on to mention the tributaries who held the country after the conquest, is a strong circumstance against the truth of this tradition; and if any such persons as Ben Gaur and Chandrabhan existed, which from the circumstance of the

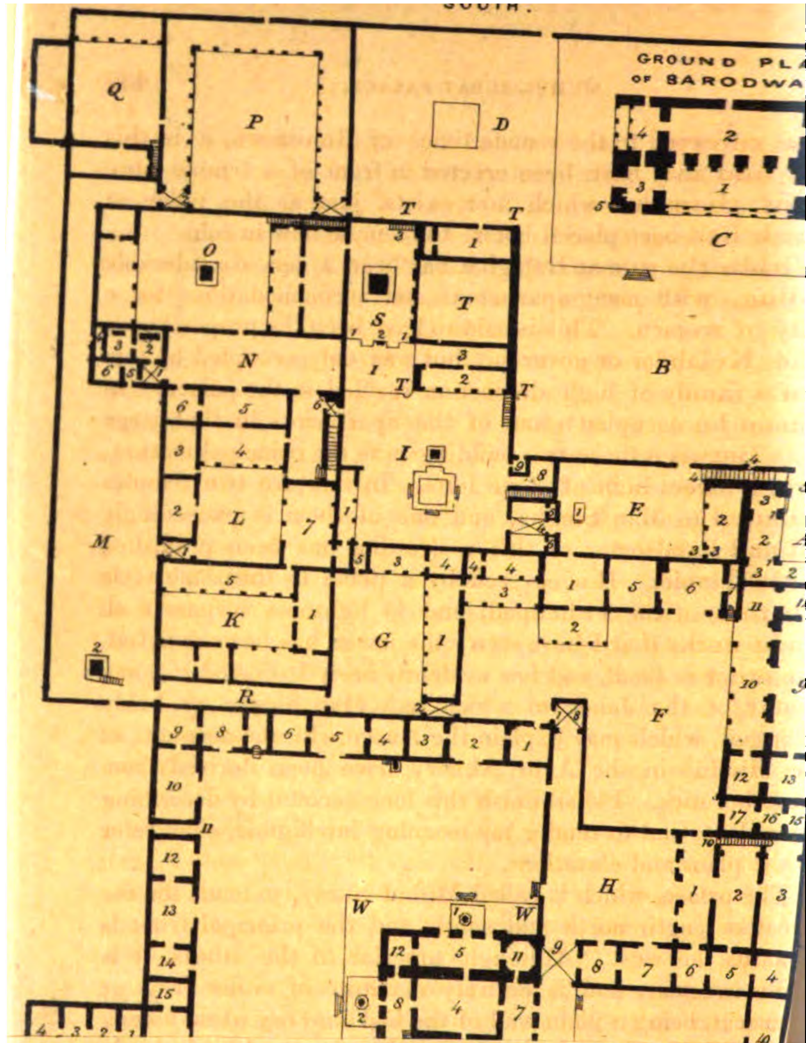
tanks is not improbable, they may have held Rautas before Pratapa Dhavala; and, in fact, the Belaunja Raja, who pretends to be this person's descendant alleges, that he was the great great grandson of Chandrabhan. This genealogy is however liable to numerous objections, as will be afterwards mentioned.

At the south-east corner of the table-land is an old temple called the seat (Chauri)) of Rohitaswa, where it is said that an image of that prince continued to be worshipped, until the time of Aurungzeb. It is situated on a small but steep peak, which commands an extensive, magnificent and varied prospect, far over the country beyond .the Son. To the summit is an ascent by 84 steps, about eight inches high, 10 inches wide, and 10 feet long, which is by far superior to any other stair in the place. The steps are still quite entire, nor does it appear to me that they can be older than the time of Man Singha; but the temple is evidently much older. The lower part of the shrine is still standing, and the arch by which it is covered is still entire; but the pyramid by which the arch was surmounted, and the porch, have fallen. The image, as I have said, was removed by Aurungzeb, but the door contains some figures. The orthodoxy of its founder is denoted by a Ganesa on the middle of the lintel; above it are four animals so rudely carved, that it is impossible to say, with certainty, to what class even they belong. They have however some resemblance to what is usually called the Hangsa or goose of Brahma (Anas Casarca). On each side at the bottom, is a man in the act of drawing a sword. From all the circumstances we may probably refer this temple to the time of the three Rajas, who dug the tanks, and who probably lived in the 10th or 11th century. Behind the temple is a small mosque, built, according to tradition, by Aurungzeb, when his zeal triumphed over the worship of Rohitaswa. At the bottom of the stair is a small but very handsome temple, universally attributed to Man Singha, and nearly in the same state of decay with the stair. The image from this also was removed by Aurungzeb, when he purged the place of idolatry. Near this is a large heap of stones, still perhaps 20 feet high, which has lost all symmetry of form, but may have been a column like that on Giriyac, which is called the seat of Jarasandha. If any thing about the place

tresses (1, 1, 1, 1,) which support the roof, are a kind of room like recesses (3, 3, 3,) probably for the higher ranks of the

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but may have been a column like that on Giriyac, which is called the seat of Jarasandha. If any thing about the place

can be referred to the remote times of Rohitaswa, it is this heap, and may have been erected in front of a temple more ancient than that which now exists, just as the pillar at Giriyak has been placed before the temple now in ruin.

Within the gate at Rajaghat has been a very considerable building, with many apartments and accommodations for a family of women. This is said to have been the proper house of the Kelahdar or governor, but was only occupied by him when a family of high distinction resided in the palace. In common he occupied some of the apartments in that large pile. Between these two buildings was the principal market-place, a street built of stone huts. In this are two temples attributed to Man Singha, and one of them is exceedingly neat and handsome: of this a drawing has been published by Mr. Daniel. It is covered by a dome in the same style with that of the Vishnupad, and in lightness surpasses all Hindu works that I have seen: the image has been removed. The other is small, and has evidently been dedicated to some Avatar of the Jains, to which sect Man Singha probably belonged, which may explain the reason why the accounts of the Hindus in the Ayin Akbery have been derived from these heretics. I shall finish this long account by describing the palace, and to render my meaning intelligible, shall refer to the plans and elevations.

The palace, which is called Muhul Suray, extends for the greatest length north and south, and the principal front is towards the west. Although superior to the others, it is quite irregular, and is entirely destitute of either taste or grandeur, being a plain wall of the bad masonry usual among the natives, in general of no great elevation, and having only one door, and a few pitiful windows scattered at great and irregular distances. The door is the most ornamented part, and is a large Gothic arch, having on each side a rude figure of an elephant, from whence it is called the Hatiyu pul. Within is another arch of the same dimensions, which leads into a guard-room (A) one of the most elegant parts of the whole building. Two sides (2, 2,) are surrounded by a stone platform for the guards, in place of the benches usual in our guard-rooms, while in three of the corners, behind the buttresses (1, 1, 1, 1,) which support the roof, are a kind of room like recesses (3, 3, 3,) probably for the higher ranks of the

guard. The room (4), in the fourth corner is larger than the others, has no air but by a very small door, and resembles strongly a dungeon. The roof of the guard-room is plastered in the alcove form with many small compartments, somewhat like those in the stone roofs of our cathedrals, but intended merely for ornament, and consisting entirely of plaster, the roof being supported by beams and flags of stone, passing horizontally from wall to wall. The arches, which in some places pass under them are so rude, as scarcely to be able to support their own weight. The roof is divided into four great compartments, one in the centre, one in front, one towards the north, and the fourth towards the south. The only passage into the interior is by this last, through a high double arched gate-way (5), which leads into an open area (B) or Chauk. On the west side of this is a gallery, (1) open in front, and terraced above. The pillars in front are square, and the cornice as usual, consists of sloping flags supported by brackets. The door 3, leads into a small outwork (4), which commands the gate. The door 2, leads into the area of another court (C), which is only distinguished from the former by being elevated a few steps. This open gallery was intended for the accommodation of persons who came on business, and who approached to the presence of the Kelahdar, or chief person in the place, by the door 2, the great man sitting in his office, which occupied the centre of the inner area (C). No person durst proceed straight up in front.

This building for the transaction of business is perhaps the most regular part of the whole palace, and that in the best taste. It is called the Barodwari or 12 gates, and communicates its name to the square (B) in its front. An elevation of the northern face has therefore been given in the drawing. It has in front an open hall (C) supported by four double columns, and two double pilasters with the usual cornice. Over this are five small windows, and above them a kind of pediment, in which there is a window, before which there is a balcony four or five feet square, which is covered by a dome supported on four pillars. On each side of the colonnade is a small plain door, and above each a similar balcony rather below the level of the windows above the colonnade. The hall within the colonnade (1) was occupied by the clerks, while those,

who came for admission having sneaked from the corner door, stood with joined hands on the threshold, until one of these clerks was pleased to communicate his business to the governor, who sat in a hall behind (2), and issued his orders through the clerk. The two halls communicated by five doors of a proper size, so that a man can pass through without stooping, but which would not admit a waggon. In general however, it must be observed, that in native buildings no medium is observed in the size of the doors. They are either monstrous gates, or mere creeping holes. Above each door is a small arched window, but except that in the centre these do not penetrate into the inner hall. At each end of the outer hall is a small square room with four doors (3, 3,). The roofs of these three rooms in front are flat, and are supported by stone beams covered with flags. The end rooms are very low, but the central hall is of a good height, rather more than its breadth. The great hall behind (2,) is a fine room with an alcove roof divided into three compartments; that in the centre high and round, those at the ends low and semi-circular. At the back it has one door with a window over it, the door leading into the area; and at each end it has the same. These doors at the end of the hall lead into two low square rooms (4, 4,) which are open in front, and supported by a double row of small square columns. At the east and west ends of the building, near the front corner, a stair (5, 5,) leads up to a small door, and passes up from thence through the thickness of the wall, being as usual here narrow, dark and steep. After ascending a short flight, a door leads into a small chamber (see additional plan 6, 6,) over these on the ground floor (3, 3,) with an alcove roof, and two alcove recesses. There is a window in front with a balcony as described, when speaking of the external appearance of the building. In the recess towards the front hall (1) are two windows, one opening into that, and the other into a vault above it. The other recess, leads into a narrow passage (7, 7, 7,) through the wall between the halls 1 and 2, and above the doors by which these communicate, and has a view into both by the windows, which I have mentioned as being above the doors. This passage called a Shah Nushin is about two feet wide, and forms a communication between the upper part of the two ends of the building, the central hall No. 2,

occupying the whole height. From the narrow passage at each end is a door of communication with a small handsome room (Nos. 8, 8,) over those marked (Nos. 4, 4.) These rooms have a coach-roof, and open in front with three arches supported on short pillars. Each has a window in the end opposite to the door, and another which looks into the great hall (2) below.

The same stairs, by another very bad flight lead up to the flat roof of the building (see additional plan), surrounded as usual by a heavy parapet wall about 6 feet high, part of which in front is raised into the pediment; and you enter by a small gallery (9) supported by four pillars into the balcony or Gunbji (10) described as in front of the pediment. On either side of the gallery a stair (11, 11,) still more execrable than the others, leads down into a very low roofed vault (see additional plan, 12) which is above the front hall (1), is lighted by the five small windows in front of the building, and is divided by four gothic arches into five compartments. This served as a treasury. Behind the extreme compartment, at each end, there runs south into the thickness of the wall an arched gallery (13, 13,) about 3 feet wide, and reaching to the back part of the building, but without any opening, except the small door, by which it communicates with the vault. These galleries held the money, while the vault in front was the office of the accomptants, &c. The vault at each end looks down into the small chamber (6) by the small window mentioned when describing it. To return to the roof, at each end towards the north front is a small dome (14, 14,) supported by eight pillars, forming a cupola, or what the natives call a Gunbji. Were it not for the monstrous parapet wall these would have a very good effect, as such cupolas are the only light or showy parts of Hindustani buildings; but from below no part of them can be seen, except the very summit of the domes (15, 16.) Sixteen are elevations *(Chauvutaras)* on the terrace, on which the people sat to enjoy the cool of the evening. The five windows behind these in the parapet wall gave a view of the country; and it would seem, that in fair weather the evenings and nights were usually passed on the roofs, on which account these are always surrounded by walls or screens.

There is nothing else remarkable in this court (C), except

that it had to the east a lower area (D), distinguished from it only by being on a level with B, and having in its centre a small tank. These two areas B and D served as parades for the guards, where they assembled to be viewed by the governor seated in the Baradwari. In the area B is a small door (No. 4), with a window over it. The door leads into a den under a stair, and the window into the stair itself.

The small court E is called Roshun Shuhidka Chauk, from its containing the tomb of a martyr (No. 1) named Roshun. The west end of this court is chiefly occupied by a gallery (No. 2) open in front. This was intended for persons in waiting. The door (No. 3) leads into the gallery, and is merely meant for uniformity. No. 4 leads to an execrable stair, which is long, dark, narrow, and steep, and which in its course has been defended by two doors. Ascending this stair, we come to a narrow landing place, having a door to the right, and another in front. It brings us into some apartments above the main guard A, as may be seen in the plan of the upper story of the building, and terminates in a small closet (1), with a door to the south (2), from which there was access to the roof of the gallery (1) in the area (B), which has on both sides a low parapet.

Another door (3) leads into the corner of an open terrace (4, 4, 4), surrounded by a high parapet wall. Another more elevated terrace (5, 5, 5, 5), about four feet high, projects from the west wall of this area, and occupies most of its space. On the centre of this elevated terrace is another octagonal one (6) still higher, and probably intended as the evening place of recreation for the chief officer of the guard. In the western wall of this area are two doors leading into two small chambers (8, 8) in front of the gate, where each has a balcony (9, 9) covered as usual with a cupola; and between there is another small chamber (10), with which both communicate, and in front of which is a small window (11) immediately above the point of the arch of the outer gate. The northernmost of these three small chambers communicates by a door (12) with the interior of the palace, to which I shall afterwards return. On the south side of the area is a stair (13), open above, and leading to the roof of the small chambers, a terrace surrounded by a parapet, and having in front two small cupolas, in which the low minarets of the

gate (14, 14) terminated. It seems to have been afterwards discovered that this terrace commands a view of the women's apartments, and a rude high wall appears to have been built above the original parapet, and this was covered with a pent roof, which must have disfigured the gate, the only external part of the building in the least handsome. These additional works have in a great measure fallen.

The area F was the abode of the eunuchs. The chamber No. 1 is handsome, with a coach roof, and has in front and at one end two fine open galleries (2, 3), behind the latter of which are a chamber and closet (4, 4). The chamber No. 5 has a plain coach roof: No. 6 is handsome, having an alcove roof divided into many compartments, and a large arched gate, and two small windows towards the area. At its west end is a small door leading into a hovel (7) under a stair, which enters however from the area. This stair (8) is perhaps the best in the building, being four feet wide, and the steps tolerably easy: it leads up to an area above the chamber No. 6, which is surrounded by a very high parapet wall, (see Plan of the upper story No. 15). On the east side of this area is a small neat chamber (No. 16), above No. 5; it has an alcove roof in compartments, and two windows, one of which looks into the women's apartments, the other into the area E: this has before it a balcony and cupola as usual. This apartment is called the Ranggamahal, or abode of pleasure, and seems to have been the sleeping room of the Raja Man Singha. A stair (17) leads up to its roof, which in place of being surrounded by a parapet wall, is surrounded by a row of square pillars, about four feet high, which have been united by screens of stone fretwork, most of which is gone. This roof commands a full view of the women's apartments, and was probably a place where the chief might sit concealed to watch their conduct. To return to the lower apartments, at the west end of the area F in front is an open gallery (10), supported by four columns and two pilasters, with a sloping cornice as usual. The roof is supported by six great arches, which divide it into seven narrow compartments, again arched. At each end a wide arch conducted into two chambers (11 and 12). Behind this gallery, and lighted from it by a wide door and two windows, is an ugly hall with an arched roof (9), and having at each

end a small door, communicating with two dismal dens (13 and 14), which communicate also with the rooms (11 and 12) that are before them. Beyond this are three retiring closets, one within the other (15, 16, and 17). They have no light but from the outer door of 17, and no covered communication with any other part of the building. It may indeed be observed, that in the whole palace there was scarcely any covered communications from one set of apartments to another; and that very often indeed there was no going from one room to another in the same set without being exposed to all the inclemency of a burning sun, or to the torrents of rain which pour down in such a climate. Above these apartments is a large terrace, as will be seen in the plan of the upper story (18). This area is surrounded by high parapet walls, which totally exclude a view of the women's apartments, so that the male attendants of the Raja, or his friends, might be admitted to his principal place of residence (28) through the apartments above the main guard (A). In the west side of this parapet are three small windows looking out to the court in front of the castle. North from these is a handsome room (19), with a door to the south and another to the east, while on the west there is a window with a balcony covered as usual, but larger than common, as it is covered by three cupolas. The roof of this chamber has been composed of flags joined in a bad manner; and some of them, therefore, have given way. A narrow hanging stair (No. 20) led up to the roof; but some of the steps have given way, and it is no longer practicable. This and the other hanging stairs in the building, although they at first sight resemble those so called in Europe, are of a very different and rude structure. One step is no support to the others; each is upheld entirely by the end built into the wall; and, although the projecting part never exceeds two feet in length, many have given way. At the north-end of this area a short open stair (No. 21) leads to a small area (22) on the west side of which are two retiring closets (23, 23 above Nos. 15 and 16), and each has in front an open area (24, 24).

Returning again to the area, F, on the ground, we find a chamber (18), which was the station of a guard of eunuchs, and it forms the chief entry into the women's apartments,

and also into the area H, the more peculiar residence of the Raja, or prince.

The area G was probably the place where women waited in the open galleries 1 and 3 for admission into the eunuchs' lodgings, either to sell commodities or to be carried into the inner apartments. The passage from without was through the alley R and the door 1 in the court M. The guard-room 2 was the entry into the interior. The area K is surrounded on three sides by buildings, and was probably kitchens for the ladies.

The open space M, to which no buildings are immediately attached, seems to have formed a general route of communication, and had in it a small tank (2), to which all the domestics might resort. The apartments round the area N L appear to have belonged to the male domestics of the Raja, and the stair leads up to the terrace, by which they are covered, and from thence into a chamber, which has been above No. 1 in the area K; but the roofs of both upper and lower chambers have fallen, and I know not whether or not the communication went further. These terraces overlook all the area of the baths N and the space M, into which, therefore, the ladies never came. The baths in the area N consist of an antichamber (1), a cold (No. 2), and a hot bath (No. 3), with boilers (4) heated from without, and a retiring closet (6), with a passage (5) opening both to the antichamber and to the open space M. The baths, both hot and cold, have been dug up in search of treasure. They are lighted from above by a small circular opening in the summit of the dome, by which each is covered. From the area of the baths N into the area O, are two doors for the sake of symmetry, for one would have answered every purpose equally well, as will be seen by the plan.

In the centre of the area, O, has been a small reservoir of water. The apartments here seem to have been intended as a place of repose after bathing. A stair leads to the roof of the buildings, which as usual is terraced.

The small area (S) at its north end has had some buildings (1) between it and the area (I), the use of which, as they are very ruinous, is not very clear; but in the central projection (2) there is a niche, above which is an opening about 6 inches

high and 3 feet long. Terminating in this, I observe three water pipes, and it probably formed an artificial cascade, as in the area there is a stone basin evidently intended to receive the water. The use of the niche over which the water fell was probably in order to contain a light to illuminate the cascade when it ran in the dark.

The area S communicates by an open stair (3) with the large terrace T, on which a building called the Palace of Flowers is situated, and which forms also a part of the buildings which surround the area I. Under the side of this terrace, which fronts the area S, are six small recesses. Under its end, which faces its area D, is a kind of cellar, No. 1, with one door. Finally, under its side towards the area I is a long gallery (No. 2) supported by square buttresses, and behind this gallery is another cellar (No. 3) with two doors. The building called the Phul Mahal, or Palace of Flowers, as will appear from the separate plan, occupies the whole terrace T contiguous to the area D and B, from which its outer wall rises perpendicularly; but along the area S there is a walk (1) about 4 feet wide, and towards the area I there is an open terrace (2) as far back as the gallery and cellar. An open stair leads up to this at the west end of the area E. The building consists of a central hall (3) with three small doors towards each side, and another at each end. A man cannot pass any of them without stooping. The end doors open outwardly into wide arches (4, 4,). In the centre of this hall has been a cistern and jet destroyed in making accommodation for the family of Kasem Aly. On each side of the hall is an open gallery (5, 5,) with a door in each end, like those in the ends of the central hall, terminating in wide arches (4, 4, 4, 4). On each side of the terrace (2) a stair leads up by the walls which bound the terrace. That on the east is for the sake of uniformity, and ends at a false door; that towards the west leads up by an execrable covered stair to the roof that is covered by an abominable parapet wall, 7 feet high, in which there are various peep-holes. Under this, all round, has been a cornice of the usual form, and had this been surmounted by a balustrade instead of the parapet wall, the whole building would have been neat. The building, however, forms a good set of apartments designed for a place

of cool retreat, in which, surrounded by jets of water, the Raja might sit to transact business.

The chief entrance into the area I is by a guard-room (4), which has stone benches for the guards on each side of the passage, and holes at one end (5, 6), I presume for holding ammunition. Adjoining to the guard-room a stair leads up to the roof of the adjacent buildings; and near this is a passage into a retiring closet (8). South from this is the door of a small chamber (9) by which there is a communication with the area B. Opposite to the guard-room is an open gallery (1) for the accommodation of those in waiting. In the centre of this area I has been a reservoir and jet of water. The area P, to which there is admission through two small guard-houses (1, 2,) according to people on the spot has been designed as a kind of theatre, or place for looking at dancers and singers; and the apartments round the area Q were intended for their accommodation to dress and refresh before they began to perform. These apartments have been placed at a distance from those of the ladies, and in the vicinity of where the Raja could go under pretence of business in order to avoid the offence which the ladies might take at his frequenting such company. See addition, No. 4.

Returning to the area H, which was the principal seat of the chief's grandeur and more legitimate pleasures, we find on the ground-floor some large apartments. No. 1 has a large arched gate in the centre, on each side of that a large window, and beyond each of these a small door. Its roof is low, and supported by six Gothic arches, dividing it into five compartments, each of which has a pavilion or coach roof. Behind this is No. 2, a long low-roofed hall, which communicates with the gallery by one wide-arched door and two windows; but is not so long as the gallery, a stair which leads to the upper story being taken from the S. end. Behind it communicates by one small door with a long dark cellar, No. 3, which at its south end, under the stair, has a recess. In the north end of the hall is a small door leading into a small arched room (5) behind, which is a dark cellar (4), the door of which is not above 2 feet high. Opposite to that door the chamber, No. 5, communicates with a suite of three rooms (6, 7, 8), of which that in the centre is very handsome.

It is supposed, and highly probable, that the lower apartments of this area were the wardrobe and depositories of other valuable effects. At the end of this suite is a chamber (No. 9), which completes the north side of the area, and formed the chief passage with two very wide Gothic arches into the ladies' garden, which was separated from the east side of this area by a wall surmounted by a balustrade.

The stair (10) which conducts from these lower apartments to the second story is exceedingly bad, and an irregular and dangerous landing place at its top [see plan of the upper story, No. 25] has two doors, one to the right and the other to the left. The latter forms the communication with the upper parts of the buildings at the west side of the area F; that to the right leads into the end of a very fine open gallery (No. 26), with a flat roof supported on each side by four massy buttresses, and four semicircular arches with fine cornices, so as to have a grand solid appearance, although rather heavy. At the north end, opposite to the door of entry, is a recess with an alcove roof in a very good style.

Behind this gallery is a very fine hall (28), called the Emperor's Throne (*Tukht Padshahi*) in the same style; but it has an alcoved recess at both ends. It communicates with the gallery by a grand door and two very large windows, which have been skreened by fret-work in stone. This differs a good deal from the windows of our cathedrals, and does not equal their appearance, although it has a very fine effect. It is intended to conceal from full view, without excluding the air. In the back wall of this hall are two small windows towards the western face of the castle, and each has had a covered balcony; but these windows are not regular, the one being towards the south end of the hall, and the other being within the northern recess, from which also there was a window that looked into a small chamber (29) at its north end, through which there was a passage to the terrace on the roof of the ladies' apartments. The Raja, therefore, even sitting in state, had an opportunity of seeing what was going forward in that quarter. The style of architecture in this hall, and the gallery before it, will be understood from the elevations accompanying the plans.

Before the gallery is an area (No. 27), open above, but shut in towards the area H by a high parapet wall, so as totally to

exclude a view of the ladies. At its north end is a door, by which turning towards the left, there is the passage to the small chamber (29) above mentioned, through which was the entrance into the terraced roof of the ladies' apartments; and by the right was an open passage along the roofs (30) of chambers 7, 8, and 9, on the ground floor.

At the south end of the terrace No. 27 is a stair, partly open, partly covered. Although tolerably light, and rather wide, being from three to four feet, this stair is exceedingly steep. It leads to the roof of the great hall and gallery (No. 26, 28), which is surrounded by a wall and balustrade, and to some buildings, forming the third story of this part of the building, of which a separate plan is given. In the north parapet, towards the west end, is a small cupola leading to a window, and covered balcony (No. 1) overlooking the terrace on the roof of the ladies' apartments. At the south-west corner is a handsome square room (2) supported by four Gothic arches, behind the southern of which is a semi-circular recess. This room has one door, and two very small windows. At the south-east corner of this terrace is another stair (3), partly covered, partly open, which leads to the fourth story of this part of the building, on the roof of the chamber in the third story just now described. Of this fourth story also a separate plan is given. The small chamber (1) is open towards the north, where it is supported by four slender columns. The area on the terrace in front of this chamber has been surrounded by stone pillars, between which there were screens to conceal the ladies, who might occasionally be admitted. A very narrow passage leads from this small apartment along the stair to a cupola (No. 2) supported by four pillars, which commands a most magnificent view, having not only the whole country, but almost every area of the castle perfectly exposed. This is the highest pinnacle of the building, and has a showy light appearance.

I now proceed to the flower garden (Phulwari) as it is called by the Hindus, or (Khaneh Bag) house-garden, as it is called by the Persians, which is in fact the abode of the ladies, or Zenana, as we call it, from the Persian Zenana Muhal (womens' apartments); but this term appears too plain to Hindustani jealousy, which chooses to exclude altogether the mention of the sex. It forms a large square from the

south-west corner of which the area (H) has been taken; but on every other part it is surrounded by apartments one story high, as will be seen on the plan. The most usual form of each apartment consists of a hall opening towards the garden with a wide door, and having at each end a room, which is lighted by one window, but sometimes receives no air except through the hall. There are, however, several irregularities, as will be seen by the plan. It is probable, that, when not too much crowded, each lady had one of these apartments for herself and slaves. Three staircases, as will appear by the plan (7, 22, 44), led up to the roof near the south-east, north-east, and north-west corners, where there are buildings, to which we shall afterwards return. There are also two private entries from the outside of the castle, marked No. 11 and No. 38. The latter is guarded by two small chambers (39 and 40), which form a projection; but, to my great surprise, there would appear at the other passage (11) to have been no precaution except a wooden door. I am inclined however to suspect, that both these passages were made by Colonel Goddard, to give access to his men, probably quartered in the flower-garden, and that the passage No. 11 had been originally a stair like No. 22, and that the passage No. 38 has been like that marked No. 26, which leads into two chambers projecting in conformity with numbers 39 and 40, and which probably served as baths. The passage No. 18 led into a small area (U) surrounded by nine apartments, as will appear from the plan. Nos. 7, 8, and 9, seem to have been retiring closets, the others surrounding this area seem to have been the apartments of careful women attendants. In the wall between 8 and 9 has been a stair, leading to the terrace on the roof.

The area, called the Phulwari, has probably in fact been a flower-garden, and is divided into numerous parterres by various narrow paved roads, crossing each other at right angles. The flowers of course have long ago vanished.

The chief ornament of this area is a square building called the Aynah Mahal, or mirror of palaces, the residence of the chief's married wife. It is placed near the centre on a terrace (W), to which on three sides there is an ascent by a stair leading to a cistern (1, 2, 3,) in which there probably was a jet of water. On the west side were two stairs, and no

cistern. The building is very clumsy. Each side in front has three doors, and some way above them a cornice in the usual form. Above the cornice is a window with a covered balcony, and the parapet is crowned with a clumsy balustrade. In other respects the whole of each front is a dead wall, varied only by six windows placed regularly indeed, but entirely unornamented, and quite pitiful in size. Within on the ground floor, which was probably the usual resort of such of the ladies, as enjoyed the wife's favour, are nine chambers, and a stair, the distribution of which will be seen from the plan. The rooms 5, 6, 7, and 8, are tolerably light, airy, and high in the roof, which consists of a plain semicircular arch. The rooms, Nos. 9 and 11 are neat, being octagons with two doors and four windows; two to the outside, and two towards the rooms No. 6, and 8, and five, and 7. The roof forms a hollow hemisphere, and is rather too lofty. Nos. 10 and 12 differ only in being square, and are also very neat. The central room, No. 7, were it lighter, would be also handsome; but its four doors are very low, as the stair passes over one of them. Each door has over it a window; and, had that under the stair been sacrificed, the doors might have been made of a good height. The hemispherical roof, which covers the centre, is supported by four Gothic arches, and within the arches at each end is a semi-circular alcove completing the roof in length.

The stair, which goes up from No. 8, is 3½ feet wide, but very steep. It leads up to the roof, or second story, the form of which will be seen by the additional plan. The terrace (31) is surrounded by a high parapet wall and balustrade, in which, as I have mentioned, are four windows with four covered balconies (33, 33, 33, 33), and it surrounds an elevated terrace (32), and a small building (35) above the stair, through the middle of which there is an arched passage (36). Above this a stair, exceedingly steep, leads to a small platform (38) on the summit, which is covered by a cupola (39) supported on four pillars not quite so high as that above the royal throne, but still commanding a most noble view both of the country and castle. At each corner, above the chambers 9, 10, 11, and 12, is a small square room (34) covered by a dome, too low to have any effect from below. Each chamber has a door, and two small windows.

I now return to the buildings above the roof of the ladies apartments, which is flat. Above the doors and windows their front, towards the area was ornamented all round with a sloping cornice, above which was a low parapet wall, sufficient only to prevent those walking on the roof from falling over; but above the roof on the opposite side, the outer wall of the castle rose 10 or 12 feet higher than the terrace (40), which formed their roof.

Above the stairs Nos. 44, 22 and 7, are three small buildings (41), which cover the stair, and open with a door to each side from the landing place. A stair (42) leads up from the terrace to the small platform on the roof of each of these buildings, on which has been constructed a small cupola or Gunbji supported by four pillars (43). On each of the three corners of the roof of the ladies' quarters, above the apartments 9, 24 and 42 is a square chamber (44), which on two sides towards the terrace has a door and window over it, and a window on each of the two sides, that look towards the country. Each of these latter windows leads to a covered balcony, which of course was carefully covered by screens.

A wretched open hanging stair (46), such as before described, leads to the roof of each of these rooms, which are light and handsome, being nearly cubes. On the outside they have all round a sloping cornice, surmounted by a low parapet wall, which could not conceal from view the ladies, that might ascend, and which of course they never were permitted to do, except in the dark.

Above the chambers 27 and 28 is a small area (47) open above, with a retiring closet (48) behind it; but there is nothing analogous above the corresponding apartments Nos. 39 and 40.

Before the west front of the castle is a large area, not however corresponding exactly with the dimensions of the front, as it does not reach to the southern end, while it passes the northern, as will appear by the plan. It has three gates towards the north, south and west, but none of them is in the centre of its respective side. That towards the west had above it a gallery for the band of music called Noubut, and through this gate came an aqueduct about four feet high, which brought water into the flower garden from a small tank at some distance west, from whence it was raised by

machinery. This aqueduct cut the court into two, so that there could have been no passage for a carriage from the north to the south gate, and horses could only indeed have passed by scrambling over a steep ascent paved with stones, which was in the line of the two gates. Except at the gates the area was surrounded on every side by a high wall, on the inner side of which was erected a very narrow gallery opening towards the area by numerous arches about five feet wide, with buttresses between, of about three feet. The gallery was not subdivided into rooms, but served as barracks for the men, immediately attached to the governor's persons. The roof of the gallery served as a rampart, defended by the outer wall rising into a parapet capable of defence against musketry. The centre of the west face was ornamented by a cupola, supported on four pillars, and overlooking a small tank.

The whole walls are constructed of squared stone, built in the same irregular manner as mentioned in the account of the monuments at Shahasram. The roofs consist of stone beams and flags covered with plaster. The walls in most parts have been plastered, and painted with glaring colours in various rude fantastic ornaments. Man Singha aware of the people, among whom he was placed, introduced nothing of the Hindu mythology into the ornaments; and the only things that could in the least affect the most scrupulous Moslem, are the two elephants on the gate of the palace, and a griffin on the gate at Kothotiya.

MOHANIYA.—This division contains a considerable portion of the table land, the appearance of which does not materially differ, from that already described. The recesses in the sides of the mountains are not so extensive nor magnificent as in Shahasram and Tilothu; but there are here some detached hills, and the spaces between these and the great mass, being in some parts well cultivated, the views there are exceedingly fine. The plain is very fertile, and most fully occupied, so that the land is too valuable to be wasted on useless plantations.

There are 400 houses built of brick; 700 have mud walls, but are two stories high. Of these 400 are tiled, 300 are thatched. All the huts have mud walls; $\frac{1}{16}$ of them may be tiled; a very few belonging to the poorest creatures, are covered with stubble; the remainder has thatch of grass.

Mohaniya, where the officers of police reside, including Estuart Gunj, contains 200 houses, of which some are very large, being inns with very numerous chambers disposed in a long range.

Chayanpur is a good country town of 1,000 houses, neater than usual in this country, and in a very fine situation in respect to fertility, salubrity, and prospects. It was formerly the residence of a considerable Hindu Raja, and afterwards, being occupied by the Pathans, became a favourite residence of some branches of Sher Shah's family. In the vicinity there are many monuments and tombs of these Pathans, and some of them are handsome buildings; but they have eradicated the objects of idolatrous worship.

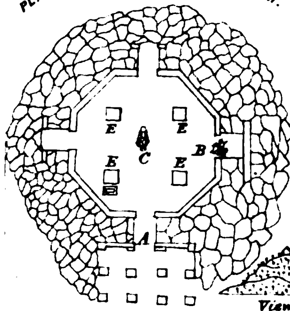
Bhaguya contains 550 houses. Jahanabad about 200. It has an inn *(Seray)* built of brick, and still in repair, although attributed to Sher Shah. Kargango Pusli contains 125 houses; Bhagawanpur, and Sawar 100 each.

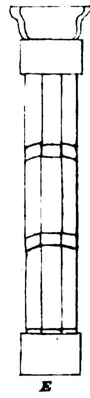
There was a certain Munda, whom people pretty generally call a Chero Raja; but the Pandit of the survey says, that he was a Daitya, who had a brother named Chandu, and both lived in the golden age. These brothers who, according to the Markandiya Puran, were the chief military officers (*Scnapati*) of Sambhu and Nisambhu, two great infidel (*Daitya*) kings, were killed by Parwati, who on that account is called Chamunda, a title, it is said, composed of the two infidels names. It is further said, that the proper name of Chayanpur is Chanupur, derived from one of the brothers who resided there, while a small temple named Mundeswari, and situated on a hill about five miles east from Chayanpur, was built by the Daitya Munda. If there is any foundation for the Puranic legend, it may refer to some exploits in the Indian warfare of Semiramis; but from the appearance of the ruins I have little doubt not only of the truth of the common report of Munda Raja having been a Chero, but that he was some small chief, who retained a dependent principality long after his nation had ceased to possess the imperial dignity. The town where Munda resided is called Garohat, and was situated on the banks of the Katane, just in the eastern mouth of a valley formed between the great mass and the detached range of hills west from Bhagawanpur. The whole of this valley was originally called Mukeri Kho; but

that name has of late been restricted to a large recess towards its east end, down which the Katane flows. The situation was judiciously chosen for the residence of a person such as I suppose Munda to have been; as it is not only in a very rich country, but has behind it recesses in the mountains that are capable of defence by a small force; and even in case of defeat, the mountains afford a secure means of escape. It would appear from numerous heaps of bricks that the town of Garohat extended about 1½ miles from east to west, and half a mile from north to south: it has not been fortified; but I believe that all the passes into the valley have been defended by lines. I thought that I could trace a very high rampart and wide ditch running in a straight line from the great mass of hills to the detached hill east from Bhagawanpur, and the pass between the latter and the detached hill next to it towards the west, at the village of Suraiya, has been defended by a double rampart of stone. On a little eminence overhanging the Katane at Garohat, have been collected some fragments of images called Hanuman, who at present is a favourite in that part of the country; but none of them have the smallest resemblance to a monkey. I could trace three of them to resemble entirely, what in the ruins of the Behar Cheros were called Ganesa, Hargauri leaning on a bull and lion, and Narayan riding on Garur. A head also resembled that of the image called Vasudeva. The works, which by the vulgar are attributed to the Cheros, extended also all along the north side of the detached hills, both east and west from Garohat, where they have left several tanks and reservoirs, and some scattered images. Among these Rumajaya, my native assistant, on the road between Majhar and Garohat, observed a Buddha seated in the usual posture, the most remarkable of these detached works is however the temple of Mundeswari already mentioned. I could not conveniently visit the place, but sent a painter, who drew the most remarkable part (see drawing No. 4). The temple, now very ruinous, has been an octagon supported by four columns (E) of an order common in Behar, and has had a porch supported by eight similar columns: having had four doors, it is much lighter than usual, although one of the doors is shut behind. In the centre is a Siva Lingga (C), with four human faces on the phallus. The image called Mundeswari (B), or the god-

BAD

1





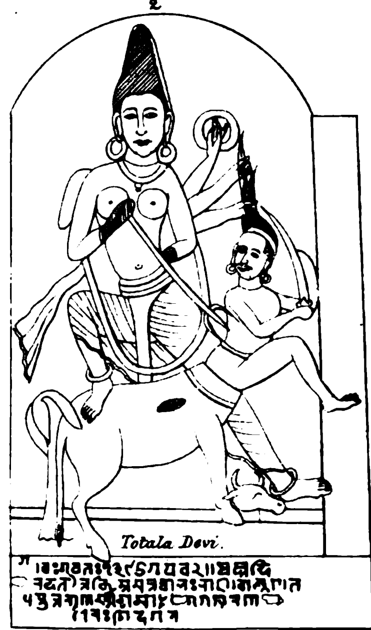


View of Mundeswari.



D

2



Totala Devi.

[illegible] Lithog

der of Miranda; is an armed female, having nearly
riding on a buffalo; it probably represents the
demon, a celebrated antagonist of Parwati; the
are evidently resemble those of the Buddhists, a
the door, behind which is a small cavity without
opening. The inscription (D) is on a loose st
distance from the temple; were it entirely leg
that it could throw little light on the su
Pandit thinks, however, that he can discern tha
deity, which being in the male gender would be
to the Lingga, and not to the goddess. The
temple towards the porch (A) is exceedingly fine
no light on the subject; the figures on it repre
ers, musicians, and such like personages. Abo
tribes assemble here at a fair (Mela).

A family, the chiefs of which have been sty
Bhayanpura, pretends to the honour of having
Cheros; but the whole history of this family is
the utmost difficulty, and most of the Sabawar tr
it belongs are so violent, that no intercourse will
be procured. The agent of the head of the fami
that he was descended from a Lakshmi Mal, w
Sikri Futtehpur, near Agra, and after 52 gene
succeeded by a Sarivahan Raja, who was 10th
Drigpnath, the present representative of the
very little reliance is to be placed on this ac
agent pretended that every Bhat (genealogist)
a list of the succession, but I applied to sever
nied any such knowledge, and said, that the
only of Raja Sarivahan, the son of Chitra Se
having died without male issue. All other c
observed, attribute the erection of the Chero
ras, and these, as I have already mentioned,
the Paramarkas. I therefore conclude that
are one of these predatory tribes, who expe
and kept possession of the country until the L
captured by the Mohammedans. So ignoran
the agent who favoured me with the preceding
he stated Lakshmi Mal, who lived 64 gene
have been employed by the Mohammedans
Cheros. The family pretends also, that not

dess of Munda, is an armed female, having many hands and riding on a buffalo: it probably represents the wife of Mahisasur, a celebrated antagonist of Parwati: the hair and ears evidently resemble those of the Buddhas: it is placed in the door, behind which is a small cavity without any external opening. The inscription (D) is on a loose stone at some distance from the temple; were it entirely legible, it is so short that it could throw little light on the subject. The Pandit thinks, however, that he can discern the word Mundeswar, which being in the male gender would be applicable to the Lingga, and not to the goddess. The door of the temple towards the porch (A) is exceedingly fine, but throws no light on the subject; the figures on it representing dancers, musicians, and such like personages. About 2000 votaries assemble here at a fair (Mela).

A family, the chiefs of which have been styled Rajas of Chayanpur, pretends to the honour of having expelled the Cheros; but the whole history of this family is involved in the utmost difficulty, and most of the Sakawar tribe to which it belongs are so violent, that no intercourse with them could be procured. The agent of the head of the family pretended that he was descended from a Lakshmi Mal, who came from Sikri Fatchpur, near Agra, and after 52 generations was succeeded by a Sarivahan Raja, who was 10th ancestor to Draponath, the present representative of the family; but very little reliance is to be placed on this account. The agent pretended that every Bhat (genealogist) could give me a list of the succession, but I applied to several, who all denied any such knowledge, and said, that they had heard only of Raja Sarivahan, the son of Chitra Sen, and of his having died without male issue. All other castes, it must be observed, attribute the overthrow of the Cheros to the Siviras, and these, as I have already mentioned, were expelled by the Paramarkas. I therefore conclude that the Sakawars are one of these predatory tribes, who expelled the latter and kept possession of the country until the Paramarkas were restored by the Muhammedans. So ignorant of history was the agent who favoured me with the preceding account, that he stated Lakshmi Mal, who lived 62 generations ago, to have been employed by the Muhammedans to expel the Cheros. The family pretends also, that not only by far the

greatest part of this district, but a considerable portion of Benares was included in their dominions; but, if all claims of a contrary nature and equal authority be taken into account, little reliance can be placed on this assertion. It is not even known to which tribe this family belongs, as the Sakawars partly call themselves military Brahmans, partly Rajputs, just probably as each title happened to be most in credit, when the ancestors of each party began to adopt the doctrine of caste. Some allege that Lakshmi Mal and Sarivahan were Brahmans, others allege that they were Rajputs, and others, that the one was a Rajput and the other a Brahman, while the present representative is a mixture, the daughter of Sarivahan having married a person of the caste different from her own. There can however be little doubt, that Sarivahan Raja of Chayanpur had raised himself to considerable power, and had rendered tributary to him most of the petty landholders in the vicinity. The ruins of his fort and house at Chayanpur indicate his being a person of considerable note, and the tribe has still many small estates, is numerous and very violent.

The fort of Chayanpur, surrounded by a ditch, has a rampart of stone with battlements, a round bastion, at each corner, a large handsome gate in the northern curtain, and a smaller one towards the south. In the middle of the east and west faces have also been semicircular bastions. The whole extent, including the ditch, is 390 feet from north to south, and 369 from east to west. The space within has been filled with buildings, partly brick partly stone, with several very large wells lined with stone, reservoirs for jets of water, and other comforts becoming a family of rank. Sarivahan is by many said to have been the first person of his family that rose into great power, and many allege, that he was the last who retained it; while others allege, that his son and grandson continued to enjoy the estate. One thing is universally agreed on, that the last Raja in the male line was destroyed by the imprecations of Harshu Pangre, his purohit. The monstrous legend concerning this personage is the only one circumstance, about which people are agreed, being altogether wild and impossible; and it seems to me an invention of very modern date, that is since the Company's government has checked the Muhammedan power from injuring the Hindu

worship; for the enraged ghost of this Brahman, who died in sitting *dhurna** on the Raja, is now the principal object of worship in the vicinity, and several buildings have been erected on the spot, within the fort, and close to the monument of a Muhammedan saint, a place, into which no devil durst have thrust his nose, so long as the Muhammedan officers retained authority. I have little doubt, that the Chayanpur Raja, having as usual become refractory, his fortress was destroyed by the Moslems, who settled a colony of Pathans at his capital, and rendered most of his vassals independent of his authority, but did not strip him entirely of his estates. This seems to have been about 250 years ago; and soon after Bhagawan Raja of Chayanpur, seven generations ago, retired to the banks of the Suura, where he built a town named after himself, and a mud fort suitable to his reduced circumstances. Within this he built a small castle of brick, now totally ruinous. The representative of the family can in fact trace his pedigree no higher than this person, who is usually said to be descended in the female line only from Sarivahan, but this may be owing merely to the legend, in which the enraged Brahman pardons a daughter of the Rajas, who had given him a drink, and the persons descended of Bhagawan claim to be Sakawar Rajputs, which they could not do, were they descended of a Sakawar female. That their claim is generally admitted by the Rajputs of the district, we may be assured, as one of them is connected by marriage with the family of Bhojpur. The present owner of Chayanpur, although called a Pathan, is in fact of the Sakawar family, his ancestor, in order to save his estate, having adopted the faith. The priest of the enraged ghost, who destroyed Sarivahan, a Kanoj Brahman is now making a considerable profit, all those in distress and fear, flocking to induce him to make burnt offerings *(Hom)*. He has of late been disturbed by a person, who says, that he is descended of the ghost, and claims a share. This pretender is the most violent fellow, in talk at least, that I have ever seen. He is a good looking young man; but, in order to intimidate his adversary, he goes nearly naked, and has painted himself red

* Dhurna signifies sitting at the door of your enemy or debtor without food, until justice be done to the aggrieved.—[ED.]

white and yellow, in large irregular patches like an American Indian. At Yamaya, about five miles north from Chayanpur, I was shewn what is called the house of the Brahman Harshu Panyre, whose ghost is now the object of worship; but it seems a work of greater antiquity than the fort of Chayanpur. It seems to have been one of the small mud castles usual in the country. Near it has been a temple, now reduced to a square heap of bricks and stones, many of which have been carved, and have contained images; but these are so much defaced, that only one can be determined. This represents the monkey Hanuman, or the great hero (Mahavira), as he is here more usually called. The style of the carvings resembles that of the Cheros, to whom the temple probably belonged.

Among the Pathans of Chayanpur was an Ahtiyar Khan, whose eldest son Futeh Khan married a daughter of Sher Shah. Ahtiyar died in peace, and is buried in a monument little if at all inferior to the tomb of the king's father, and now in a better condition. Only a few trees have been permitted to take root, and they have been occasionally stunted by having their branches lopped, but the roots have never been removed, and are now tearing a corner of the wall to pieces. The Mojawer has 80 bigahs of land, and 5 anas a day, which no doubt were settled on his ancestor by the Pathan lord (*khan*), in order to attend the tomb; but the Mojawer directs all his attention to the tomb of the blessed Asman Shah; for a dead saint is often much better than a living one, and worth a hundred dead lords. The blessed Asman is indeed a good deal attended; but his tomb being in another division, I shall return to it again. The inside of the dome of Ahtiyar Khan's monument is an octagon of 53 feet in the shorter diameter. The wall all round the niche for prayer has been plastered, and covered with pious sentences written in black, and these perhaps extended all round the dome. The wall of this is 12 feet thick. The gallery round it is 9 feet wide, and the buttresses which support the arches in front are 6 feet square. The style of the building is exactly similar to that of the monument of Huseyn Khan at Shahasram, only that the great dome is surmounted by a small cupola, as in the tomb of Sher Shah. This monument is surrounded by a square area enclosed by a high wall, at each corner of which is a square chamber, surmounted by a very

clumsy dome. The gate is large, and, were the masonry good, would be rather handsome. The area contains a number of fine trees and palms, which give the whole a grand air, especially as a hill overhangs it to the west; and between the hill and tomb there is a fine little river, so that the situation is most judicious. The tomb contains 25 graves, 12 of which have been destroyed by the water dropping through the roof. Besides the grave of Ahtiyar Khan, distinguished by a column at the head, there are entire the graves of four grown males, three women, five male children, and one female. No tradition remains concerning the fate of Futeh Khan, although there is not a doubt that he and his children suffered in the wreck of his kinsman's family. A younger brother, Daud Khan, resided here, and at the time of the Mogul's success was erecting several buildings. His tomb is a little north from that of his father, and is much smaller. It is square without, and an octagon within, and would no doubt have been covered with a dome, but when he met his fate that had not been commenced. The Moguls have permitted his body to be buried within.

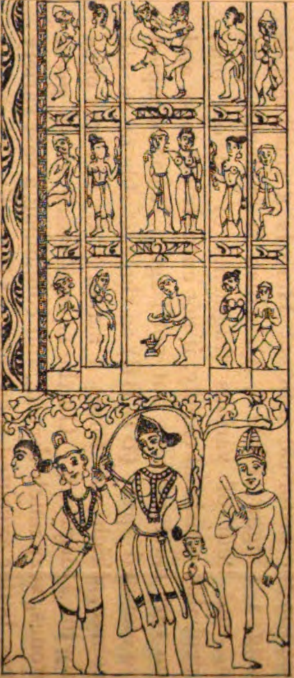
About three miles and a half east from Chayanpur is a tomb much like that of Daud Khan, but the dome has been completed, and the whole is in good repair; yet nothing is known of the person who is buried in it, except that he was a Pathan named Mauli Khan, and that he communicated his name to an adjacent village, which now belongs to a Hindu, and has done so for four or five generations.

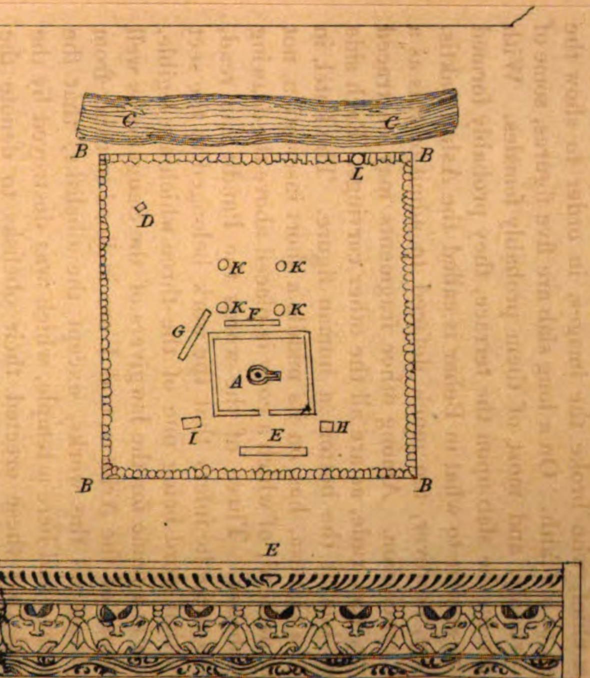
Ramgar.—The whole of this division is level, and in general it is of a rich soil very fully occupied, and too valuable to be wasted in useless plantations. No house is built of brick. About 650 houses of two stories have mud walls; 100 of them are roofed with tiles, and 500 with thatch. The tiles seem to be making rapid progress, as they have been introduced within two or three years. All the huts have mud walls; thirteen-sixteenths thatched with grass, three-thirteenths with stubble, sugar-cane leaves, or a kind of rush (*Scirpus*) called Teni. Ramgar, where the office of police is situated, contains about 200 houses, but the best place in the division is Angoti, which contains 500; Kota, Dabarak, and Ketheju may each contain about 300; Morat 250; Barari, Mukhrao, and Mujan 200; Narahan 150; and Maharatha

100. At Darauti, about five miles north-east from Ramgar, are some old remains attributed to the Suir or Siviras, who, the people there suppose, lived in the Treta Yug.* The most considerable is a tank, estimated by the natives to be about 1300 feet long from east to west, but not near so wide. At the west end is a smaller tank, evidently much more modern, and said to have been dug by a Muhammedan chief (Munsabdar), who came from Delhi, and broke the images of the Suir. In fact several of them, though not all, have been broken to pieces. Near the south-west corner of the great tank, under a tree, there is a small Ganesa pretty entire. A little south from thence on a square terrace of earth, probably quite modern, is placed a Lingga. At three corners of the terrace are placed three small compressed obelisks of stone, such as I have seen nowhere, except in ruins attributed to the Suir, but pretty common all the way on the south side of the Ganges as far at least as Chandalgar, and very numerous I am told about Benares; both of which places no doubt belonged to this tribe. On the four sides of the base are four figures, on one of the narrow sides is a Lingga, on the other a Ganesa; on one of the wider sides is a male with two arms, standing between two male attendants, and resembling a good deal the images, which in Behar are called Surya; and on the other wider side is a female standing with four arms, and leaning on the heads of two female attendants, who are kneeling. She has two flowers in her hand. The annexed drawing (plate 8) was completed from all the three obelisks, where one had suffered, some of the others being found entire. On the east side of the mound is a slab, which contains three figures sitting, one evidently a female; and the others may have been so, but they are much defaced. South from this a little way is a small heap of bricks with a good many images and stones, and it is probable, that the others have in modern times been taken from this heap, as where they now stand, there is not the smallest trace of old buildings. Among the bricks are two pretty large images, one broken through the middle, the other much defaced. The former has four arms, and has some resemblance to that called Vasudeva in Behar, but has no attendants. The other

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* See Introduction.







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J. Netherclift Lithog.

is evidently Varaha, although different from that at Baragang, and is still an object of fear, as many disputes are settled by swearing in its presence. Two smaller images resemble the Surya on the obelisks. On the bottom of a long slab there is the representation of a male and female, with their arms round each others necks. Above them is a figure of the human hand between the sun and moon, the idolatrous representation of Allah, used by the Muhammedans in the south of India, and probably carved by the zealous chief, who broke the images, in order to show the triumph of his faith. On a long slab are five figures, some of them certainly, and most of them probably females. With the three on the slab upon the terrace, they probably formed a group, similar to what in Behar is called the Ashtu Saktis. They are, however, too much defaced to admit of this as a certain conclusion. Among other fragments may be traced the door, very rude, as are all the other carvings. Each side as usual has at the bottom a human figure. The lintel, in place of a Ganesa, has on its middle a short inscription, not entirely defaced, of which a copy is placed above the drawing of the obelisk. Three of the words the Pandit can read, and from these he infers that the work belonged to the sect of Jain, that word being one of the three which are legible. But Jina is a name for the lawgivers of the Saugatas as well as for those of the Arhitas, and I am inclined to think from the style of all the works, except the obelisks, that the Cheros have had here a temple, which was destroyed by the Suir, and that these erected their obelisks to denote the triumph.

At Baidyanath, about six miles south from Ramgar, is the ruin attributed to Raja Madan Pala the Suir, which has been mentioned in the historical notices. Here is a small temple containing a Lingga (*Plate* 6, A), which is evidently quite modern, and built of various fragments of an old one, which probably consisted chiefly, if not entirely of stone, and has been very much carved, but not large. It has occupied a square elevated space (B B B B) on the east side of an old water course, which now forms a marsh (C C), but was once probably the Durgawati. On the square space are a great many stones, very much carved, and containing a vast variety of figures, better executed than those at Darauli. There are

in particular a great many square obelisks of a different form from those at Darauli, but also very common in the works attributed to the Suir. Every one is broken more or less; but at D in the plan is the most entire, and the four sides, so far as remain, are copied in the drawing. In order to show the form complete, I have had drawings made from three of these obelisks (*Plate* 7), that I found pretty entire at Bhuyili, about 10 miles east from Chandalgar in the district of Merzapur, where there are many remains of the Siviras. In the same style with these obelisks are many stones, three or four feet long, and eight inches or a foot wide, which contain figures on one side only, and have probably been built into the walls for ornaments. The figures on both these kinds of stones have less connection with the common Hindu mythology, than any I have ever seen, even in the heretical temples of Behar or Nepal; but we see here several indecencies, which in the south of India have been carried to such a gross length; and which have been avoided in the more ancient temples of Behar; for the Lingga common there has in general little or no resemblance to what it is intended to represent. As these figures are curious, I have in the several drawings (7) given a great part of such as are entire at Baidyanath; and copied from the various obelisks and long stones above mentioned. So far as I observed, no regularity is observed in the position of the different figures, nor are all those on any two stones the same, but the same figure may be observed in many different places. Some seem to represent the ordinary occurrences of life, such as a woman suckling her child, or churning butter, or a porter carrying a load. Others are quite monstrous, such as a man riding on a serpent. A figure often repeated seems to represent a butcher killing a cow or buffalo; for he has the animal suspended with the head down, as if about to remove the skin. From this perhaps we may infer, that the Siviras, if they did not eat the ox, at least devoured the buffalo, a practice still followed in Nepal. Besides these obelisks, and the stones carved on one side with human figures, there are numerous columns, pedestals, cornices, capitals, &c. and a remarkable circumstance in their style is, that the foliages in many parts are not in relief, but are cut into a level surface, as in a seal. This has a very poor effect, as may be especially

Obelisks at Darauu.

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J. Netherclift Lithog

seen on the lintel (*Pl.* 6, E) lying before the door of the present temple, where the lions' heads in the centre are carved in relief with a very fine effect, but at the two sides the foliages cut into the stone have little or no show. The four most remarkable stones seem to me to have formed the niche, in which the image originally worshipped was placed. That (*Pl.* 6, F) which was undoubtedly the throne, still remains in its place, behind the present temple, and has before it the bases of four columns, which supported the roof of the shrine, and towards which the figures are turned, so that the door must have been to the west, while that of the present temple is towards the east. The figures represent two dancing girls, with each a band of music. At each end seems to be a Devata with some attendants. In the centre are some animals on curious wreaths of carving. The stone G, *Pl.* 6, lying near the above, seems to have covered the niche, and represents the Hindu planets, nine in number. In the centre and at the two ends are three Devatas. The stones H and I, *Pl.* 6, now placed erect near the door of the present temple, appear to me to have formed the sides of the niche. Their general plan and ornaments are sufficiently alike for the purpose of symmetry, although there are small differences in some of the figures.. No traces are to be discovered of the image, which occupied this shrine, and which was no doubt the principal object of worship; although there are also many Linggas scattered about, and which no doubt belonged to the old temple. One of the pedestals of the columns which has supported the old shrine is drawn at K, *Pl.* 6, which will in some measure show the nature of the order. The capitals are depressed, and have numerous flutings on their sides like those in the Elephanta Cave near Bombay. The shaft is circular. The inscription (L *Pl.* 6), formerly alluded to, was found on the shaft of a column at L, among the fragments heaped up to form a fence round the temple. If the 700 annexed to the name refer to the year of the era (Samvat) at present used, it will give A. D. 643 for the time of Madan Pala or Magaradhaj Yogi, which agrees very well with the time, when I have supposed the Siviras to have governed, being 82 years later than the inscription of Phudi Chandra, the last probably of the Chero princes. No Pujari is at-

tached to the present temple, but 400 or 500 people assemble at the Sivaratri.

Sangyot.—The country entirely resembles Mohaniya, consisting partly of a fine plain, partly of a table land, and partly of fine valleys lying between the great mass of hills and some detached ridges, where the scenery is uncommonly fine. The plain is fully occupied, but somewhat bare of trees, or rather has too little variety in its plantations. Three houses are partly built of brick. One at Masui, belonging to Churagh Aly, lately Kazi, is a considerable building, and looks well at a distance. There are 1000 houses of two stories built of mud, 200 of them tiled, and the remainder thatched. Several of them are very large, especially the mud castle of Amao, also belonging to a Muhammedan family.

Although the level country is very populous, there are scarcely any towns. Sangyot, where the office of police is situated, is a very sorry place, containing about 100 houses; Karodiya and Sirbhit may contain a similar number.

There are in this division some considerable remains of the Suir, and the most remarkable is called Patana, from having been a capital city, or Nindaur, from its having been the residence of a Nindu Raja of the Suir or Sivira tribe. It is also often called Srirampur Patna, from a village of the former name, that now occupies part of the ruins. From the name and appearance of the place, there is some reason to suspect that this may have been the abode of the supreme chief of the Sivira tribe. The chief ruin is a mass of rude stones, broken bricks, and earth, extending 780 feet from east to west, and 1080 from north to south. This is composed of five unequal masses, very irregular in height, but in most parts from 40 to 50 feet above the level of the plain. At the distance of three and a half miles it has the appearance of a small hill. There is no appearance of a ditch, nor of any other fortification. East from this great mass is another nearly of the same length, but narrower, and not near so high. Its south end is called the Charmar Toli, or shoe-makers' quarter. On its north end are two ruinous mud castles, built by late Zemindars, but now decayed. North-east from this a little way is the village called Patana, or the city, from which we may perhaps infer that the town was in

1







Images at Mer.

2



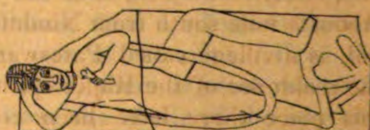
Mahawra, or Warlike Monkey _ at Bhali.

3



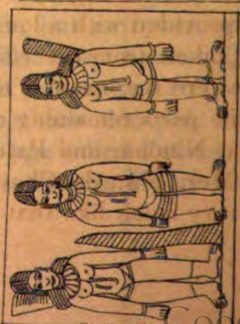
Carved Stone, the side of a niche, from Mer.

4



Mahawra.





Images at Nindaur Patna.

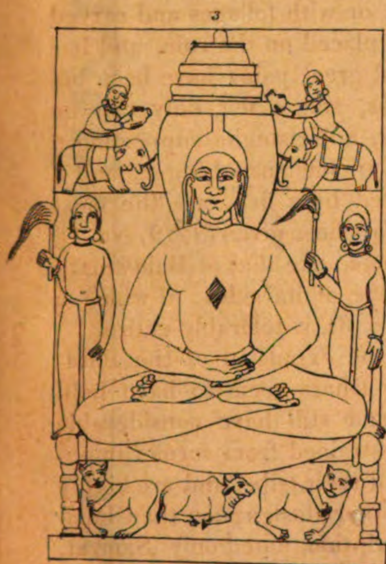
that quarter; but, consisting merely of huts, has left no traces. Under a tree near this village a Lingga has been placed, and surrounded by a wall, within which have been collected some broken images in the style of those at Baidyanath, especially fragments of the quadrangular obelisks. One stone, *Pl.* 9, No. 4, is rather remarkable, containing three female figures with ruffs, like those used in the reign of Elizabeth, and probably the dress at the court of the Siviras. The largest image, and which, probably, was that originally worshipped, represents Mahavira, the warlike monkey. West from the great mass, and north from the village of Srirampur, is another considerable elevation of stones, brick, and earth, like that called the Shoe-makers' Quarter, but having no appropriate name. South from Srirampur is a circular mound, pretty high, and called Baghban, or place of refreshment, probably because the people of the village go there in the evening and sit under a tree on some stones, which they have collected from the ruins. It was probably a temple. Three of the tanks drawn in the plan, although they have Hindu names, were probably dug by the Muhammedans, as their greatest length is from east to west, and as the tomb of Saiud Aly, lately mentioned, is on the side of the most considerable. About a mile south from Nindaur, at the bottom of a small hill, is a village called Pateswar, perhaps from having been the residence of the Raja's spiritual guide. Under a tree at this place there have been collected many fragments of carved stones, such as are usual in the works attributed to the Suir; and lately, in cleansing a tank, there was found a large image of Mahavira, which, after having been disgraced, has again come into favour, and is well anointed with oil and red lead; but it is half hid in a terrace of clay, on which it has been placed. As the Mahavira or Hanuman of the Suir differs a good deal from the manner in which he is now usually represented, having no resemblance to a monkey, except in being provided with a long tail, I have given a drawing, *Pl.* 9, No. 2, taken from the ruins at Bhuyili, in the Merzapur district, where the image is entire; and, so far as I could judge from the parts remaining or visible here, quite the same with those at Nindaur and Pateswar.

At Mer, towards Chayanpur, has been a temple of the Suir, very much like that of Baidyanath; but here the foun-

dations of the temple remain, forming a square platform 4 or 5 feet high, with a projection from its north side. The space within is filled with ruins, besides which many stones highly carved are scattered about; and it would appear that the whole outside of the building has been covered with small images of men, beasts, and gods, or with foliages and carved mouldings. A Lingga has been placed on the ruin, and has a priest of the sacred order; but great pains have been bestowed in destroying the images, and a few only can be traced. A Ganesa with 14 arms, a Nrisingha supporting a religious person reclined against an immense Lingga, and a Lingga with four heads supported by a fish, are the most curious, and drawings have therefore been given (*Pl.* 9, No. 1), The niche for containing the image, like that at Baidyanath has been thrown out, and only one of its sides, of which a drawing has been given (*Pl.* 9, No. 3), is tolerably entire.

Among the tribes, which on the expulsion of the Paramarkas seized this country, the Bhars seem to have held a great part of this division, and still have considerable estates. Of late, having been restrained from former impurity, they have become ashamed of their tribe, and are highly offended at being called by any other designation than Parihar Rajputs; although in an inscription, dated only (Samvat, 1858), A.D. 1801, the chief of the family plainly acknowledges the term Bhar. They seem formerly to have lived in very excellent style, and the ruins of three stone castles, which they have at different times occupied, are still in no great state of decay, the walls even of Ramgar, the oldest, being still pretty entire. This building, which is placed on the steep ascent of a hill, commanding a narrow passage into a very wild valley, is curious. The stronghold is nearest the foot of the hill, and consists of a square space surrounded by a wall about 8 feet high, pierced with loop-holes, and having an open terrace towards the pass. There is no appearance that this was ever roofed. The four houses higher up have been roofed, and two of them have been subdivided into apartments, a third probably served as a hall, and the lowest as a kitchen. The masonry is neater than usual, the rows of stone being pretty regular; but that seems entirely owing to accident, the stone of the hill being by nature divided into thin layers of nearly equal thickness.

3



One of the 7 Images of the Jain, that are alike, at Masar.

4.



Nula Bhawani.

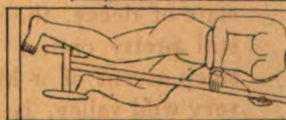
Various Figures from the Obelisks & ornamental Stones at Baidyomath.













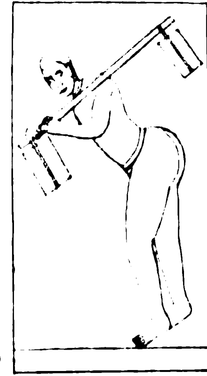
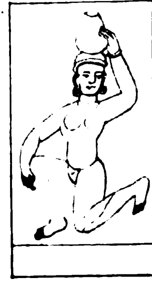
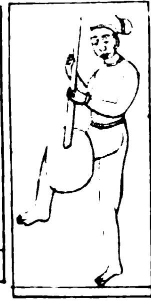


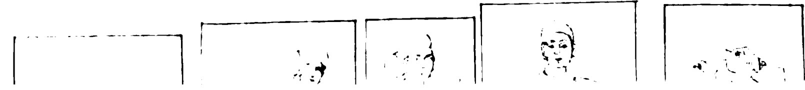


Various Figures from Obelisks and Ornamental Stones at Baidyonath

2





1












Various Figures from Obelisks and Ornamental Stones at Baidyonath.

In the pass under this dwelling has been a reservoir lined with cut stone, at the end of which is an image (plate 8, No. 4), and still an object of worship. It resembles the female image killing a buffalo, so common on Kauya Dol, in Behar, and perhaps, therefore, is a work of the Cheros. It is called Nula Bhawani.

Raghuvir gar and Syamal gar, the two more modern forts of the Bhar tribe, have more resemblance to European castles. The former is judicially situated on a low rocky ridge, extending west from the village Pateswar, already mentioned. It occupies the whole summit of the ridge, which has been separated from the village by a deep ditch.

EXPLANATION OF THE PLATES IN THE PRECEDING CHAPTER.

Plate I. to face p. 414.—The drawings in this plate are described in pages 414 and 415 and named on the figures.

Plate II. to face Dedication.—This is the tomb of Sher Shah at Shahasram, described at pages 256, 257, &c.

Plate III. p. 425.—Island on which Sher Shah's tomb is built.

Plate IV. p. 446.—Ground Plan, &c. of the Muhal Saray described at pages 439 to 454.

Plate V. p. 456.—No. 1, Temple of Mundeswari described at p. 456 and 457. No. 2 is a Cheros Image described at p. 431.

Plate VI. p. 463.—Suir Ruins—Temple of Madan Pala described at p. 463-464 and 465.

Plate VII. p. 465.—Obelisks from the Ruins of Baidyanath.

Plate VIII. p. 469.—Nos. 1 and 2, Figures from the Obelisks at Baidyanath. No. 3, a Jain Image from Masar. No. 4, see p. 469.

Plate IX. p. 467.—Images from Nindaur Patna, described at p. 467 and 468 as numbered.

*** In consequence of some alteration in the Nos. of the drawings since the letter-press was printed, the above numberings are the correct ones, without reference to the Nos. printed in this Chapter.

CHAPTER II.

POPULATION OF SHAHABAD—THEIR CLASSIFICATION, DISEASES, MANNER OF LIVING, ETC. ETC.

By the natives of this district the people are divided into four classes: gentry,* artificers,† traders,‡ and labourers;§ the observations made in the account of Behar, are applicable to this district and need not be repeated. I have only to observe, that here a very large proportion of the gentry hold the plough with their own hand; at least two-thirds of the artificers who cultivate, do so as day labourers, and not above one-third hold the plough. Taking as a guide this estimate, and the quantity of land said in each division to be cultivated by one plough, I have calculated the number of ploughmen required, and from them the number of able-bodied men in the two classes of gentry and cultivators. Where the climate is healthy, I allow, as in Behar, 475 persons for every 100 able-bodied men; but in the divisions liable to many fevers, I allow one able-bodied man only to five persons. With regard to the traders and artificers, I procured an estimate of the number of houses belonging to each, and from thence calculated their number. On these grounds I have taken the number of inhabitants at 1,418,780; and, having procured an estimate of the number of persons, according to their various ranks in the families of each division, I find, that the above population will in all give 217,525 families. The Pandit of the survey in his inquiries after the castes formed an estimate of 181,733 families, which is short of my calculation by about 16 per cent. Although the general amount of the Pandits estimate does not differ very materially from mine; yet as in Behar, when I come to particulars I cannot entirely follow his authority. In particular I find it necessary to diminish the number of Muhammedans, that were stated to him, and to increase the proportion of Hindu gentry. I am convinced, that my estimate is not overrated; for the number which I have taken allows $3\frac{1}{10}$ bigahs of land in actual culti-

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* *Ashraf.* † *Pangeh, Pauniyas* or *Karigar.* ‡ *Beniyas, Bakalis* or *Dokandars.* § *Karindagan.*

vation for every person, while in Behar each has only 2½ but owing to the neglect of the landholders, the soil of Behar is no doubt more productive than that of Shahabad.

The number of men said to be absent in the regular army was stated to be 4,680, which is a much greater drain, than exists in any of the districts hitherto surveyed, and I suspect is very considerably underrated. The Rajah of Bhojpur assured me, that from Serkar Shahabad alone, forming the northern half of the district, the number amounted to at least 12,000. The numerous gentry are well suited for the purpose, and a great degree of poverty renders them willing to enlist. The number however employed is far from being burthensome on the population. A great many of them, I observe, are married; but their wives remain at home, and do not follow the camp, so that their children are not injured by the hardships of a soldier's life. The district being in the route of most corps passing from east to west to be relieved, the men have frequent opportunities of visiting their homes, and usually remit as much money as pays the rent of a good farm, upon which their family lives in comfort.

All the gentry, who are rich, decline of course service, and far the greater part of the poor do not relish regular discipline; although for a much lower reward than is given to the soldier, they would willingly serve as irregulars or messengers. The people of this district have long had the character of being inclined to robbery; and audacious depredations are still occasionally committed, although not so often as in Bengal, and much less frequently than when the Zemindars managed the police. So far as I could learn, however, it is not the gentry who have these predatory habits, but chiefly the low caste of cowherds *(Ahir)*. Many tribes of the gentry are still however exceedingly violent in their disposition, and inclined to use force against their neighbours. In general the salutary check of a standing army prevents this from breaking out into open hostility; and their violence is allowed to vent itself in endeavouring, by all possible means, to thwart each others views, even at the sacrifice of their own profit.

The whole men, who by birth should be soldiers *(Dival-bandh)*, amount to 53,702, of which 2,095 are employed in the district, and 7,331 have gone abroad, either in the regular army or for private service; while only from 3 to 400 strangers have come here in search of bread.

The number of penmen also employed abroad far exceeds that of strangers employed here, and this is attributed to poverty, the same cause which sends the swordsmen into other countries. Commerce is carried on almost entirely by natives of the district.

The people here are inferior in industry and agricultural skill to those of Behar; and this, together with their violence of temper, has occasioned the poverty which has compelled so many of the higher castes to work, or to go abroad in quest of service.

The manners of the women are as strict as in the country parts of Behar, nor are there any small towns where the dissolute meet encouragement; yet the men are just as jealous as those of Behar. Premature marriages among some tribes are here on the same footing as in Bengal, that is, consummation takes place before the age of puberty. This custom however, has not extended far; and the people are generally strong, and tall. The Pamar Rajputs, among whom the custom of early consummation is adopted, form a striking proof of the evils of this custom; for among them I did not observe one good looking man, except the Raja Jaya Prakas, and most of them have the appearance of wanting vigour both of body and mind.* This custom, so far as it extends, and the great number of widows condemned by rank to live single, no doubt prove some check on population.

The practice of inoculation for the small-pox is not near so common as in Bengal, although of late it has become more frequent than formerly. The spontaneous disease, however, is certainly in general much less fatal than in Europe. Vaccination has made little or no progress among the natives. Fevers are exceedingly common in the immediate skirts of the hills, so that Tilothu, everywhere close in their vicinity, is very unhealthy. The banks of the Ganges also are unhealthy, and the bad air extends a considerable way into the interior, owing to the country in that direction being overgrown with forests, and much neglected. The middle parts of the district are tolerably healthy, although in general inferior to the parts of Behar, that are similarly situated. The autumnal epidemic is always the most severe. The people here also

* Early marriages in Ireland produce similar results.—[Ed.]

complain, that the country has within these three years become more unhealthy; but as I have heard similar complaints in every district where I have been, I suspect, that they are owing to the usual custom of praising old times. It is farther alleged in the vicinity of the Ganges, that affections of the spleen have of late been a more common accompaniment of fever than formerly was usual.

Fluxes and choleras are not at all common; and the Sannipatik Zuhurbad or Nuzleh is rare. The people here, as a remedy for cholera, employ tight ligatures passed round the larger joints of the extremities. Both leprosies are less common than in Behar, and it is said were formerly very rare.

The great leprosy is called Sonvaheri and Khor. By some these names are considered as denoting two stages of the same disease; the first being applied to the incipient malady, the latter to the confirmed. Others again allege that these names imply two distinct diseases; and I suspect that in fact two diseases have been often confounded, one being attended with a great insensibility of the parts affected, and the other running more to ulceration. So far as I could learn, the poor who are affected in this district are never drowned. The white leprosy, here called Charak, is pretty frequent. I saw no persons who were entirely white, but I heard of a good many. The chronic swellings of the throat, legs, &c. are also more rare than in Behar. Cutaneous disorders are not more common than in Behar. Women, it is every where alleged, are less liable than men to ringworms. The itch is prevalent in the cold season, and disappears in spring.

In the narrow unhealthy territory between the hills and the Son, I heard of two diseases as endemic. One called Dethori would appear to resemble the whitlow; the other, called Dakshini, is an eruption of small painful ulcers, which last four or five months.

On the Condition and Manner of Living of the People.—The rate of expense of the lower classes is rather higher than in Behar. Only three families, the Raja of Bhojpur, his kinsman Sahebzadah Singha, of Jagadispur, and Aly Hoseyn, of Koyatur, live in the style becoming gentlemen; and the second of these, although his expense is ample, keeps such a motley crew of dependents, that he has too little left for the support of the splendour becoming his

high rank. European furniture or equipage have not been introduced. Hawking and shooting are the favourite amusements of the great. Very few of the natives appear abroad armed, although they are of the most warlike habits, and at home are well provided for self-defence.

The expense of marriage is fully as ruinous as in Behar, and extends not only to the Hindus, but to the Moslems. Aly Hoseyn complained of the burthen; but said, that unless a man wished to appear mean in the eyes of all his Hindu neighbours, it could not be avoided. The Raja of Bhojpur, when I saw him, was preparing for the marriage of a daughter, which would cost him 20,000 rupees, although he is a very frugal man, eagerly engaged in paying off the debt with which his estate was left encumbered.

The expense of funerals is here also moderate; nor do the people in general give to their priests so much in proportion to their income as is done in Bengal. I did not hear that any one was suspected of hiding treasure.

A few of the brick and stone houses are covered with tiles. The houses with two stories built of clay, in general, as in Behar, consist only of two rooms, one above the other; but in Tilothu the Muhammedan merchants have some large buildings of this kind, fully as good as those of Phulwari. Some castles of clay are large buildings, and at a distance look well, but a near approach discloses the utmost meanness and want of comfort. Tiles as a roof, both in clay-walled houses and huts, are more common than in Behar; and the advantage is so great, especially where the country is fully occupied, that roofs of this construction seem to be rapidly on the increase. These clay houses have wooden doors, and if there is any window, it has wooden shutters; but many are without any aperture of this nature. Fewer of the houses in proportion are whitewashed or painted than in Behar. A house of two stories with clay walls, covered with tiles, consisting of two chambers, one above the other, and from 10 to 15 cubits long by six wide, costs at Arah from 70 to 100 rupees (about £10). One of the same materials and dimensions, but only one story high, costs from 20 to 40 rupees. Very few of the huts have wooden doors, and they seldom have any window. The door, indeed, in many is always open, a hurdle even to shut it being considered as too

expensive.* The common size of the hut is from 11 to 13 cubits by from 5 to 6. The poor have one hut; the rich have more in proportion to the number of the family. The roofs are still more seemly than in Behar; even those made of tiles being very rude and so flat, that few of them turn rain. The ridge is nearly straight, and is supported, as in Behar, by a beam going from one gable end to the other. Each side of the roof, as usual in India, is formed of small sticks and bamboos crossing each other at right angles, and tied together so as to form a parallelogram of the size required. This is laid sloping on the walls and ridge pole, but is not supported by rafters and beams, as is usual in Bengal. In the northern parts the two sides of the roof meet in an even line at the top, and are covered by thatch, so as to prevent the rain from coming through the joining; but in the south the same effect is attempted to be produced by making one side project beyond the other, but this is seldom effectual. The grass used for thatch here is very inferior to that procured in Bengal, but is better than stubble. The poor often use the leaves of sugar-cane, which are still worse than stubble, and in some places is used a kind of Scirpus (Narai) that is worse than either. Two other plants, the Bagai and Teni, are used for thatch, and are bad as the Naria; but I had no opportunity of examining their botanical affinities. Except in this greater rudeness of roof, there is no difference in the huts or furniture of this district from those in Behar.

Although a vast proportion of the women are of tribes originally from the western provinces, yet, except in Arah, many fewer than in Behar use the petticoat (Lahangga) and bodice (Korta), and none of the Hindu women have adopted the drawers of the Muhammedans.

Although, as in Behar, the Hindu men of rank have in a great measure adopted the Muhammedan dress, when in ceremony, and especially at marriages; yet in their ordinary dress almost every Muhammedan now uses the Hindu fashion. Exclusive of Patna and Gaya, where much more luxury prevails than in any parts of this district, the people here are

* What an idea this simple fact affords of the poverty of the mass of people!—[Ed.]

provided with clothes and shoes nearly as in Behar, and they are nearly as dirty, although I nowhere saw them lousing each other in public.

Not above 40 families have their women adorned with jewels, and fully bedecked with gold and silver. About one-sixteenth of the women have a gold ring in their nose, some on their fingers, and silver bracelets on their arms and ancles. Perhaps nine-sixteenths of the women, exclusive of widows, have the gold ring in their nose, and ornament their arms chiefly with glass rings, and their ancles with bell-metal; the other six-sixteenths use chiefly bell-metal and tin. Painting the forehead with red lead is not so common as in Behar, and those who use it are more moderate in the extent which they cover. Anointing with oil is still less practised than in Behar; blacking the eyes and tattooing the women are on the same footing.

Cutaneous disorders are rather less common than in Behar. Those who sleep on the bedsteads called Palang, have in general curtains, although in some divisions this luxury is totally unknown. They have always a matrass and pillow, and for a covering in winter, have a quilt stuffed with cotton. Those who sleep on the second kind of bedsteads called Charpai, never have curtains, but have bedding and covering similar to those above-mentioned. Of those who sleep on the wretched bedsteads called Khatiyas, some for bedding have a blanket or Satarangji, but many lie on the bare ropes; and, when these are made of the grass called Sabe, it is almost impossible to keep them free of bugs. In cold weather they cover themselves with a blanket, a coarse sheet (Gulaf) or rug. Those who sleep on the ground cover themselves in the same manner, but seldom can afford a blanket. In cold weather they sleep on straw, especially that of the Kodo; in warm, they have coarse mats.

The quantity of animal food used here is much smaller than in Behar. The rich and the higher castes use chiefly goats flesh, for geese are not killed; there are very few pigeons, and no ducks, and the Hindus reject fowls. The low tribes indeed have many swine, and feast on pork twice or thrice a month. The eating of meat, therefore, is not in this country to be considered as a standard for ascertaining the circumstances of the people. Game gives no great sup-

ply, and it falls chiefly to the share of the lower tribes of cultivators; but the higher ranks often regale on partridges and quails, the only birds of which they are fond. Lean goats-meat is sold daily in the market at Arah and Shahusram, and the Hindus, except a few Brahmans, do not scruple to buy meat from the butcher. In small places these tradesmen kill whenever there is a demand; no beef is publicly sold, but I suspect that more is used than is generally avowed; for both here and in Behar there are butchers who live by killing black cattle. In both districts it would seem that the Muhammedans are afraid, and avoid giving publicly their neighbours the highest offence that can be shown to a Hindu. When they eat beef, therefore, they conceal the matter as much as they conveniently can. To the inquiries, therefore, that I made, conducted chiefly by Brahmans, the people of both districts denied the crime of beef eating. The flesh of buffaloes is in little or no request. Fish is still scarcer than in Behar, there being very few large reservoirs. The luxury of the natives in eating, turns chiefly on the use of rice, ghiu, milk, spiceries, sugar, salt and oil.

With regard to oil, the quantity considered as a full daily allowance for five persons, young and old, varied in different places from 11 to $22\frac{1}{2}$ s. w. and in general nearer the latter than the former quantity. The 2nd class is said to use from 5 to 15 s. w., average $8\frac{1}{2}$ s. w.; the 3rd class from $1\frac{1}{2}$ to 10 s. w., average $4\frac{1}{2}$ s. w., and the 4th from $1\frac{1}{4}$ to $6\frac{1}{4}$, average $2\frac{1}{5}$ s. w.; a 5th class in some divisions procures oil only on high occasions; but in most places none scarcely but mendicants are reduced to such necessity. This estimate includes as usual all that is used for the lamp and for unction, as well as for the kitchen. Some of the aboriginal tribes, as Mushahar, Chamar and Dosadh, in a great measure reject the use of oil in diet.

The quantity of salt said to be a full weekly allowance for five persons, young and old, varied from $8\frac{1}{4}$ to $22\frac{1}{2}$ s. w., average $13\frac{1}{2}$ s. w.; the 2nd class is said to procure from 5 to $11\frac{1}{4}$ s. w., average 7 s. w.; the 3rd class from $1\frac{3}{4}$ to $5\frac{5}{8}$, average $3\frac{1}{2}$ s. w., and the 4th class from $1\frac{1}{8}$ s. w. to $2\frac{1}{2}$ s. w., average $1\frac{3}{4}$ s. w.; but a 5th class in some places, although not in all, procure still less. Ashes are not used as a substitute;

but a good deal of the west country salt escapes the vigilance of the custom house.

Sugar or extract of sugar cane is chiefly used in sweetmeats for children, and at all feasts on public occasions. Adults in common, use sugar only to form sherbet, for a cooling drink in thè heats of spring. The sherbets here are made of water and sugar, or extract of sugar cane, and of capsicum or black pepper; both of which are considered as cooling.* Rice is used twice a day, by all who can afford it; but near the Ganges the staple food of the lower orders is generally the coarser grains, and in the interior these are used at least once a day. The coarse grains most common in use are barley, pease, and a pulse, Chana *(Cicer arietinum L.)* near the hills, and more commonly on them, a few poor people use as substitutes for grain, Manhuya flowers, and the kernels of the Mango Sakuya and Kend fruits.

In several places I omitted to take an estimate of the quantity of grain considered as a fair allowance for a family of labouring people; but on the bank of the Ganges I procured one, on the accuracy of which I can depend. The family of a poor farmer with one plough, and having six persons young and old, uses daily 288 s. w. of cleaned grain for boiling, and as much meal for pudding, with 72 s. w. of split pease for seasoning, in all 16 lbs. 10 ozs. of farinaceous food each day, for six persons young and old, which is a very large allowance.

The want of a large supply of palm wine is made up by a most extraordinary consumption of tobacco in chewing, and the women indulge in this filthy practice almost as much as the men. It is only a very few women that smoke. The usual daily allowance that a smoker of tobacco consumes is $2\frac{3}{4}$ s. w., or about 495 grains of the prepared drug, one-half of which is leaf. But the custom of chewing prevents smoking from being carried to such excess as is in Bengal. The use of tobacco, either among men or women, seldom commences before they are 20 years old. The spiritous liquor is chiefly made from Manhuya flowers, although a little extract of sugar cane is occasionally distilled.

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* All peppers, but the hottest in particular, are refrigeratory to the animal frame. Birds and beasts delight in capsicums.—[Ed.]

The fuel by far in most common use is cow-dung made into cakes, and sometimes mixed with husks of rice, but often by itself. In the well-cleared parts of the district fire-wood is exceedingly dear, and indeed is not often procurable, except by sending cattle and woodcutters to a great distance, and even in the vicinity of some forests it is very scarce, the trees being preserved, partly from religious motives, and partly as they shelter game, for they are of no real value to the owner. The demand for the cow-dung cakes is therefore very great, as in the cold season every one that can procure fuel burns a fire by his bed-side; and the quantity of bushes, rushes, and woody stems of various crops, such as arahar and cotton, that is procurable, gives but a scanty supply.

The free male domestics, as in the districts hitherto surveyed, are usually allowed from 16 to 8 anas a month, with food and raiment; but in Arah their wages often rise to 2 rs. The women servants, called Asil Tahalin, &c., have nearly the former allowances; but it must be observed, that in the two greatest Hindu families in the district, there is no female domestic. The women of their slaves occasionally attend on the ladies; but they are wretched dirty creatures, who pass most of their time in the hardest labours of the field. I know that all the free female domestics in one of the three divisions, where any are kept, are employed in a Muhammedan family, and suspect that the same is the case in the other two divisions. The Hindu ladies, therefore, perform most drudgeries, except the bringing water, or other such labours as would expose them to view.

Slaves are not so numerous as in Behar, but they are less indulged, for they are often sold; and when a master is so poor that he cannot feed them, he usually requires them to give him a share of their wages. In other respects they are on the same footing as in Behar, only the Hindus are more commonly called Kamkar, although most of them are of the Rawani caste; and the remainder Kurmis with a very few Dhanuks at Arah. The Muhammedans, as in Behar, are called Molnazadah. No intermarriages between free persons and slaves are admitted; and when a master has a child by his female slave, it is not removed from the state of slavery; the father only endeavours to procure for his child a marriage with another of the same spurious breed. That such con-

nections are numerous, we may safely infer from the price of young women being higher than what is given for men, the latter usually selling for 15 rs., while a girl brings 20. The children in all cases follow the mother. Poor parents seldom sell their children. I could not ascertain the number of slave women belonging to Muhammedans of rank, and kept for pleasure. The invalid soldiers have slaves, as in Bhagalpur; but these may be rather considered as adopted children.

In proportion to the number of inhabitants, the number of common beggars is more considerable than in Behar, amounting to about 3,300; but in other respects their condition is nearly the same, although they are still more annoyed by the charity of individuals being diverted towards the distresses of pilgrims. These are, indeed, often exceedingly great. When one on his return falls sick, and is unable to march, although he has set out in company with his nearest kinsmen and neighbours, he must be deserted to his fate; the means of the party are generally so much exhausted, that the utmost expedition is necessary to enable them to reach their abode. The sick person is, therefore, left without the ceremony of a painful adieu; and, unless he finds a charitable person able to provide for his wants, he perishes on the road. I am assured by the officers of police near the routes which the pilgrims principally follow, that the number which they must bury, in order to prevent the nuisance of putrid bodies, is very considerable. It costs nothing; the persons of the low tribe who remove carcasses being compelled to dig a hole, and to cover the body with earth. No attempt is made to accompany the funeral with the usual religious ceremony, nor to burn it according to the Hindu rite. The poor of the country are not only in general totally neglected, when unable to go out to beg, but in some places it was alleged that whenever one of them becomes sick, and is in danger of dying, the neighbours privately convey him to another manor, and leave him under a tree. If he survives the following day, the people on whom he has been stolen next night convey him to another manor, and the wretch is thus bandied about until he perishes. The reason assigned for this cruel conduct is, that the neighbours are afraid of the expense and trouble which attend the inquiries made by the officers of police, wherever a dead body is found to require funeral. I

believe that this barbarous practice is confined to the vicinity of Dumraong.* Eleven societies of Hijras may be mentioned among the beggars.

The number of women of bad character is very small, amounting only to 130 houses. They are mostly Muhammedans, only in the western parts of the district there are some of the Gandharvinis, or beauties so numerous about the holy city of Benares. They are nearly on the same footing as in Behar, but are not so rich as in the city of Patna. The women are watched with the utmost jealousy, for which however I believe there is very little occason; nor, except at Shahasram, did I hear of any intriguers, although of course many such must exist; but no women have a fairer character than those of this district.

What I have said concerning the manners of the people in Behar, is applicable to those of this district, only that in Chayanpur the people of most ranks have a good deal of bear-like incivility; for instance, the lower classes will endeavour to make a stranger go a wrong road, or refuse to put him in the way for which he asks; while I found that many of the higher castes, although they were of no personal consequence, declined any communication. Even there, however, the principal families were very attentive, and in every other part of the district all classes were fully as civil as in Behar; if any thing, however, they are still more cautious in their answers, or rather more stupid than the people of that district; and, although equally perhaps industrious, they have not the same skill in agriculture.

EDUCATION OF THE PEOPLE.—The sages (*Gurus*) who instruct children to read and write the Hindi character are on the same footing nearly with those in Behar. The master furnishes the Path, or school-house, and each boy gives 1 ana, and from 5 to 7 sers of grain a month. Each school may be attended by from 5 to 30 boys; but in some places they attend only during the rainy season. The children usually go to school at the age of six, and attend four years. During the two first the boy writes on the ground with a pencil of white clay (*khari*); during the remainder of the time he writes on a black board with a reed, and white liquor

* What a melancholy picture of society these statements afford!—[ED.]

prepared by rubbing the clay in water. His education is finished by his parents, who teach him to write on paper; and many parents go through the whole steps, there being no other teachers.

The Hindi dialect is now in general use, but it differs very much from the Hindi of Patna; and the dialect of Bhojpur was long celebrated for the uncouthness of its phraseology, and the difficulty with which it was understood. Near the Ganges now the more common form of the language has in a great measure been adopted, especially among persons of rank and education; but in the south even the highest persons, at least in speaking to their servants or tenants, use the old form, which differs not only in many phrases, and in containing many obsolete or barbarous words, but in the inflections of the verbs, and in being interlarded with many expletive and unmeaning particles, such as *Ba* and *Bati*, the former in Bhojpur, and the latter in Chayanpur. The inflections of the verbs are exceedingly different from the common dialect; for instance, in this district the people say *Jala*, in place of *Jaya; Aola*, in place of *Aya; Karal*, in place of *Kiya*, and so forth: and many of the most common words are totally different; as, for instance, *Rawang*, or *Raorang*, is used in place of *Tom*, you; *Phur*, in place of *Sach*, true; and *Pusar*, in place of *Jhut*, false. These, and many other words, are in all probability derived from the languages of the aboriginal tribes spoken before the introduction of Sangskrita, or its corruption the Hindi; and they may perhaps be remnants of the Chero language, which no doubt was once prevalent. Not only the Cheros however, but the Kharawars, who probably are the original inhabitants, subdued indeed by the Cheros, but still remaining totally unmixed on the table land, speak now the Hindi language. That this however was not the vulgar language, until a very late period, that is to say until immediately previous to the Muhammedan conquest, will perhaps appear probable from the inscriptions at Totala-devi and at Tarachandi, where, as I have before observed, although some part is in Sangskrita, yet many of the names are barbarous, and some parts are not understood, although perfectly legible. Some few words in this part, according to the Pandit of the survey, may be traced to Sangskrita roots; but the greater part has no

affinity to the language now spoken. It is true that the persons to whom these inscriptions refer were probably of the Raythor tribe, which is usually said to inhabit Marowar in the west of India, and it may be supposed that the unintelligible parts of the inscription are in the language of that country; for I know from several Raythor Rajputs, just come from Marowar, that the barbarous names mentioned in the inscription are still in common use in their tribe; but these Marowars speak a dialect of the Hindi language not more different from that of Patna than the dialect of Bhojpur is; nor could the Rajputs from thence understand a word of the inscription. But I shall afterwards have occasion to shew that the Raythors did not occupy Marowar until after the time when this inscription was written; and there is also reason to suspect that the ancestors of the persons mentioned in this had long resided in the vicinity; and therefore I think it probable, although by no means certain, that the unintelligible parts of the inscription are in the dialect commonly spoken by those of highest rank near Rautas in A. D. 1158.

The songs used at marriages are in a more pure style than the poetry of the Bhats, and are not entirely understood by many of the vulgar.

The higher dialect of Hindi especially the Ramayan of Tulasi das is as much read, and as little understood as in Behar, and at Arah two or three Pandits are employed to read this work as in Patna. Besides this the Bhagawat of Lalach hulwai (a translation of the 10th book Dasamaskandha) of the Bhagawat puran by Bhupatdas a Kayastha, and the Sudama charitra written by Haladhar das are occasionally read. The books composed by some persons, who pretend to have found out new roads to heaven, are also composed in this dialect. I heard that Ritu Raj Misr of Vagsar studies the Prakrita of Ravana, but the Pandit of the survey had no opportunity of conversing with him until he had become blind with age, nor of procuring an account of that language, so as to ascertain, whether or not it be the same with the Prakrita of Magadha used by the Jain. In the inscriptions of this district, which I have attributed to the Cheros and Raythors the character is pure Deva Nagri, but in those at Masar, the character resembles the Nagri common in Behar, which contains many letters different from those in the modern

Deva Nagri. The study of Persian is just as common among the Hindus as with the Moslems, almost every Kayastha endeavouring to acquire more or less. They seldom however attempt to do more than to be able to keep accompts, and to indite an epistle. The Moslems often study more, in order to fit them for the transactions of the law. The teachers are called Miang jiu, and are always in the service of some richman, who gives them from 1½ to 2rs. a month, with food, and a warm cloak for winter, for which they instruct all his children. The children of neighbours, who are allowed to attend, give from 2 to 6 anas a month each. The Persian character is not used for writing the Hindustani dialect, which, so far as I can learn, is entirely colloquial.

The persons of the Bhojpur family can read and write both Hindi and Persian, but perhaps a half of the owners of land can do neither, and of the other half not above one-fifth part can do more than sign their name, and guess at the meaning of a revenue account. Persons who have reached this degree of knowledge are here called Murkats. A great many people here however fit themselves for the transaction of ordinary business, and many go abroad in quest of employment. As usual in such cases, it is the most adventurous and able youth that go abroad; and those that I found at home, seemed fully as remarkable for chicanery and stupidity, as the scribes of Bhagalpur. The native officers of police, however, appeared to me, with a very few exceptions, very decent well informed persons.

Ten or twelve Hindu ladies have acquired the dangerous art of reading and writing letters, and about 20 in Karangja- can sign their name, and understand an accompt, but these acquirements are considered by the grave as improper, and by the childless widowhood of two ladies of Tilothu, who not only write a fair hand, but understand the poetical effusions of Tulasi das, is attributed to the divine wrath irritated by their presumptuous search after the forbidden fruit of knowledge. In general ladies of the highest rank understand only the common form of the vulgar dialect.

In the Appendix will be found the result of my inquiries respecting the state of common education in this district. In this district I heard of three Maulavis who instruct pupils in Arabic science and Persian literature. There is no public

institution for the purpose, nor do the Maulavis give their pupils food. Sher Shah established a Mudruseh or college in Rautas, but it has been long deserted.

The office of Kazi (Judge) is hereditary, and sometimes of course neither ably nor uprightly filled. In flagrant cases of corruption they have been dismissed. The Kazis are attached to pergunahs, and not to the modern divisions of police, which occasions some inconvenience.

With regard to the sciences of the Hindus the Pandit of the survey in the course of his inquiries heard of 25 teachers. The term Adhayapak is not in use, nor are the academicians distinguished from other learned men by any peculiar name, the whole being called Pandit. No one science seems to have a preference to the others, but each man is held in estimation, according to the number of sciences, which he professes, and his supposed skill. Those who teach the grammar of the Sangskrita language, are however called Savdika Pandits, and are not much esteemed, unless they profess something more. Rituraj Misr is admitted by all to be a person of great learning, the Pandit of the survey considers all the others as rather shallow. Few of them have endowments, or maintain their pupils. The Bhojpur Raja feeds those who attend Krishnalal, who is his family priest (Purohit) but he is not equal in reputation to his father Rituraj.

I shall now mention, what I can learn from the Pandit of the survey, concerning such of the books as are here taught, of which no account has been formerly procured.

Among the grammars the Chandrika, which in Behar was said to be the same with the Saraswat mentioned in my account of Dinajpur, is here said to be a different work, and to have been composed by a Ram Sarma Acharya, and to be as easy as the Saraswat. The Amara kosh is the only vocabulary *(Abhidhan)* in use. The poems composed by mere men *(Kabya)*, on whatever subject they treat, are here considered as a separate science, and are not held as an appendage to law, as in Bhagalpur, or to grammar as in Behar.

The explanation of the works of Vyas also is considered here as a separate study; but the Vedas are totally neglected, and the Sri Bhagawat Puran, and the portion of the Mahabharath called Bhagawat Gita, are the only works explained, and that according to the school of Sridhar.

In law, the great authority is the Mitakshára, or commentary on the law of Yaggnabalkya, mentioned in my account of Behar. The only other book on this subject which has not hitherto been explained, and that is used here, is the Kala Nirnaya, composed by Kamala Bhatta a Maharashtra Brahman.

Metaphysics are only taught by two persons, but one of these is exceedingly learned, and is said to possess a great number of authors on the subject. The Tantras are only taught by one person, and what may seem strange is, that though the teacher is of the sect of Vishnu, two at least of the books which he uses, belong to the sect of Sákti, and enjoin bloody sacrifices. The nature of the other book I have not learned.

There are only two professors of astrology, and these have not high reputation. The Krita Liláwati, one of the books which is taught, was composed by a certain Satananda. Of the others, the Pandit of the survey can give no account.

The two Brahmans who teach medicine, are actual practitioners. The Baidya Jiwan was composed by Lolamba Raja, but who this person was is unknown. The Yunani physicians, or followers of the Greeks among the Muhammedans, have no public teacher; they are educated as private pupils.

Besides the professors who teach Hindu science, about 400 persons are dignified with the title of Pandit, and all of them understand a little of Sángskrita grammar, of law, and of the profitable science called Jyotish; but none can be considered as at all learned.

None, except Brahmans, can legally study the word of the gods, or of the holy persons called Munis; nor has any one ventured to infringe this law, except Babu Gopal, Saran of Vagsar, a Rajput of the Bhojpur family. Two or three Kayasthas have indeed studied the Sangskrita grammar, written by mere men, but not with a view of obtaining the forbidden fruit of knowledge. Their object seems to have been to acquire what would enable them to understand the wanton pedantry of Tulasi das.

Scarcely any interlopers pretend here to interfere with the rights of the sacred order, in explaining the decrees of fate by the science of Jyotish. Besides all the Pandits, the Purohit

Brahmans, exactly similar to those so called in Behar, share in the profits of this art; and many of them called Dihuyars have an hereditary right to all the lower classes of their respective manors, just like the Panchanggas of the south of India. In this district none of the colony from Kraungchadwip, nor of the Jyosis have procured a footing; but their place is supplied by some ignorant Brahmans, not unaptly called Dakatiyas, or robbers.

In the southern parts of the district 120 or 130 women of low tribes, in the month Strawah give themselves out as possessed by Maha Maya. They come from their houses under a violent agitation, seat themselves under a tree, and speak nonsense, while their husbands beat a drum. The lower castes flock round with little offerings of grain, and endeavour to discover future events in the nonsense which the creatures utter. Some of these women are young, some old; but, after having been once affected, they usually continue to be so every year. In the intervals they are as rational as usual.

The era Samvat and lunar year are in use here, as well as in Behar. The 1st day of the month with the Hindus commences on the full moon; with the Muhammedans, when the new moon is first seen.

Besides the professors of medicine, I heard of 103 Brahmans who practise that art: two or three of them are of Kanoj, all the others are of Sakadwip. There are five Muhammedan practitioners who pretend to be followers of Galen and Hippocrates. None of the low tribes venture to interfere. The Hindu physicians are not servants, they subsist by the fees of those who employ them, and may make from 10 to 20 rs. a month. The followers of the Greeks make rather more. None pretend to practise medicine as a profession, without having studied books on the science; but many people have nostrums which they give to the sick without any fee or reward, except reputation. Few men of rank are without some recipe of this sort. There are about 40 gurahs or surgeon-barbers who treat sores, and some of them with considerable skill. These also cup and bleed; but this is done also by many barbers, who do not venture to apply drugs to ulcers. The midwives are as usual of the lowest tribes, and besides cutting the umbilical chord, treat

pains and tumours of the abdomen, even in males, by friction and dry cupping.

From 1900 to 2000 men and 100 women pretend to be possessed of the art of incantation; about 400 of the men are employed to cure the bite of serpents, and the remainder in curing the diseases attributed to the operations of witches and devils. Perhaps 300 or 400 of the men are called Bhakats or worshippers, and, as in Behar, take the devil to themselves, when they expel him from their patient.

Only 30 inoculators for the small pox reside, but these being unable to operate on even the small proportion of the people which have adopted this salutary measure, several operators come from the north side of the Ganges. Of late the practice seems to have been fast gaining ground.

Religion and Sects.—Had I, as in former districts, taken the number of Moslems and Hindus from a general estimate of the proportion between the two classes of men, given by the people of each division, I should have made the number of the former much greater than, I think, can be admitted; although the proportion stated was by no means so high, as in any of the districts hitherto surveyed. I soon found that in this district very few Muhammedans, who pretended to a decent purity of birth, would touch the plough, and that this labour, of which the Roman nobility was proud, is admitted by few only of even the low converts from the impure tribes of Pagans that follow degrading trades. I prefer therefore a list made out in each division of the different tribes of the faithful, although I am inclined to consider that the numbers are somewhat underrated; but I have had no means of forming a conjecture concerning the proportion, and therefore give the numbers such as they were procured. The reader will however do well to keep in mind, that the numbers of the Muhammedan artificers especially, are probably somewhat more than I have stated, and that the surplus is employed in agriculture, and that of course the number of the agricultural tribes of Hindus ought to be somewhat reduced.

Muhammedans.—Most of the observations made under this head in Behar, are applicable also to Shahabad. Dr. Buchanan heard of only 60 families of Shiyas, of whom two-thirds are in the divisions of Shahusram and Sangyot. Such a small number of course can give no disturbance in

the Muhurum. Among the Moslems here the doctrine of caste is fully more confirmed than in Patna, and no one person will eat with infidels, most tribes are excluded from mutual intermarriage, and many are condemned to perpetual exclusion from rank and respectability.

The Saiuds, who claim a descent from the daughter of the prophet, amount to about 330.* The Moguls do not exceed 30. The Pathans are estimated at about 2170, a considerable number of these are avowedly converted Rajputs, who on account of their congenial disposition were admitted into the fraternity of this sanguinary and deceitful people. These still retain a good deal of landed property.

All the Sheykhs here consider themselves noble, and of Arabian extraction, 700 families are called Sheykh without addition, and 50 pretend to be of the tribe of Korish.

A hundred families pretend to be descended from the warlike companions of the saint Mulek Bayo, who according to a legend of the most dubious authority was the person, that first subjected the infidels to the authority of the faith.

The Fakirs, amount to 240, and do not intermarry with the profane. Poets (*Bhats*), who have mostly small endowments, amount to 120. Mendicant Musicians 105. Retailers of fish and vegetables 285. Innkeepers. 200. Sellers of betle 3. Retailers of provision 400. This, is a very low profession among the Hindus.

These are the traders. With respect to the artists. Musicians, who perform at marriages, 5. At births, 63. In this place may be reckoned the 11 Societies of Eunuchs, that attend houses at births. Low women 125. Ballad singers 10. Falconers 5. Bow and arrow makers 7. Powder makers 22. Soap makers 7. Cotton cleaners 720. Dyers 140. Washermen 32. The Jola or weavers were estimated at 7253, but I think it probable, that there are a good many more, as it is this tribe chiefly, that has betaken itself to agriculture. Tape weavers were estimated at only 22, confined to Arah; those in the country being still Pagans. Carpet weavers 30. Taylors 350. Saddle and saddle-cloth makers 27, I believe that the two professions do not intermarry. Makers of glass ornaments 249. Barbers 220. Oil makers 30. Bakers 3. Mutton butchers 57 Beef butchers 39. Gardeners 9. Paper makers 130. Farriers 21. Cutlers 10. Sweepers and scavengers 34. Slaves 510. These are mostly employed in agriculture.

Hindus.—I have nothing new to offer concerning the origin of the castes, more especially of the Brahmans, and shall therefore proceed to an enumeration, according nearly to the respective rank, which each is usually allowed by their neighbours to hold, although this is often very different from their own pretensions. In the list procured by the Pandit of the survey he appears to me naturally enough to have exaggerated the number of the high castes, and to have overlooked the numbers of the low tribes; because the former are known to every one, and the latter live in obscu-

* All the subsequent Nos. in this section refer to families.—*Ed.*

rity. The numbers therefore, which he procured, I have corrected by estimates, made by my chief assistant, of the four different classes of people divided into the most usual prevailing sub-divisions, such as Brahman, Rajput and Kayastha for the gentry, and Kurmi, Ahir, Kairi, &c. for the cultivators, while for the artificers and traders I have followed the lists of each profession procured by the same person.

The Brahmans on such grounds I estimate to amount to very near 34,000, of which about one half may be said to belong to the sacred order; as, if employed, they could receive gifts, and perform religious eremonies for the absolution of sin. The other half belong to the military tribe, which I consider as descended of the ancient Brachmani.

It is only however a small part of the sacred order, that is able to procure a subsistence by their proper duty, 97 or 96 per cent. at least hire land, and 70 per cent. at least do every kind of labour on these farms, except holding the plough, a good many have entered into the regular military service, and a few have become merchants Not above 25 per cent. can even sign their name.

Beginning with the northern division of the 10 tribes, into which the sacred order is now usually divided, that of Kanoj contains almost the whole, amounting to about 16,000. The Kanojiyas of this district have very little learning, only four of the 25 teachers of science belonging to the tribe, which does not contain above one half of the common Pandits; but it possesses the greater part of the Dihuwar Brahmans, who, as Vossius said, *sacrificuli sunt in pagis et decipiunt vulgos*. In general the Brahmans of Kanoj are mere peasants, and many of them are inclined to arms, so that they differ very little in their manners from the military Brahmans, or from Rajputs, except that they are more sly, and not quite so violent. They do not scruple to ride in carriages drawn by oxen, a custom which gives the utmost offence to the Bengalese; while on the contrary many of the Kanojiyas here take offenee at the Bengalese eating fish, and rice that has been cleared of the husk by boiling. A large proportion of them do not know the name of the God to whom their secret prayer is addressed, nor was I able to ascertain, to which sect the greater part belongs. The Pandit of the survey thinks, that Vishnu is the favourite, while my chief assistant thinks that the Goddess has the preference. By far the greater part of them call themselves merely Kanojiya Brahmans, but some call themselves Antarvedi, some Saryuriya and some Sanauriya. These divisions seem to have taken place in the very last periods of Hindu government, when Kanoj came to be the capital of a kingdom, and are derived from the provinces into which that kingdom was divided. Those who are called merely Kanojiyas in all probality had settled here, before this division took place. The number of these called Antarvedis and Sanauriya is quite trifling; the Saryuriyas from the banks of the Saryu are not a seventh part of the whole. 34 families are distinguished from the others by the name Katthak, and obtain a subsistence by singing amorous ditties accompanied by musical instruments. In this district they do not dance, as is done at Benares.

None of the colonies of Kanyakubja, that have settled in Bengal, have

returned to this quarter, and there are only one family of each of the three tribes of Saraswat, Gaur and Maithila; none of Utkal, nor from the five southern tribes, so far as I heard, have settled in this district.

Next to the Kanojiyas the most numerous class of the sacred order is of the original colony from Sakadwip, of which there may be about 850. These adhere to their duty more strictly than the Kanojiyas, as 21 out of the 25 teachers of science, and one half of all the Pandits belong to this tribe. A few of them also are Dihuwars, and some practice medicine, so that a large portion lives more or less by some sort of science, and most of them can read and write. many of them rent lands, but few or none toil with their own hands; a few however enter into service. Their manners seem to be the same as in Behar.

Among the Brahmans, who belong to the 10 tribes of the sacred order, but whose tribe is not known, owing to the lowness of the offices, which they perform, are about 260 families of Kantahas, concerning whom I have nothing new to offer. The name Kantaha, being considered disgraceful, they are enraged when it is used; and people in speaking to them usually call them Mahapatra or Mahabrahman.

There are also about 100 Yajurhetas, and an equal number of Dakatiyas or Bhareriya, who are admitted by all to belong to the sacred order, but who would not appear to belong either to the colony from Sakadwip, nor to that of Kanoj. I have nothing new to offer concerning these priests, except that the former in the vulgar language of this district are called Vaidika Yujutiyas, and their name, I am now told, may merely imply their having the knowledge (*Veda*) of offering (*Yajur*) the sacrifice of fire (*Hota*), and may not have any direct reference to the books called the four Vedas, or four sciences. Nor is this sacrifice necessarily accompanied by any ceremonies contained in these books, although its performance is considered as one of the great external signs, by which the followers of these books are distinguished from the heterodox; but forms for conducting the same ceremony are also contained in the Tantras. The Dakatiyas, besides cheating the canaille by a pretended knowledge of futurity, and besides keeping the implements used for marking time, have betaken themselves to selling holy water, which they carry from Prayag to Baidyanath and sell at 8 rs. a load. They beg by the way. The military Brahmans in this district, although they have not acquired much share of the landed property, amount to about 16,600.

Of the ancient tribe of Khatris there are here only 14 or 15 families, mostly merchants. There are none of the Ramjani low women in this district; but four houses of Gandharbinis hold a still higher rank, and admit none to their embraces but Hindus of pure birth and consequence. No one disputes the purity of their birth, nor scruples to drink water from their hand, although they supply their number by handsome girls of any kind, that they can procure. In Benares they are numerous. The Bhatta, Bhats, or Bards amount to above 600, and have nearly the same manners as mentioned in Behar; but few of them are endowed, and they live mostly by farming, the poor having taken to the plough.

The Beniyas amount to 3460. The Kayastha may amount to 7000, of whom by far the greatest number belongs to the Sribastav tribe

The greater part of the Kayasthas can read and write Hindi, and keep accompts, and 10 or 12 of them have studied a little grammar. Perhaps one fifth part understand Persian accompts, but the number, who can indite, or explain a letter in that language, is very small. Although they keep the whole accompts of the land rent, and although a good many go abroad for employment, yet by far the greater part subsists by the cultivation of the land. When very poor, they plough with their own hand; but few only are reduced to this necessity. A few are artificers and make red-lead.

The masons and stonecutters amount to 70. The Sanar amount to about 1000, but many of them work in the base metals, and about 100 families are money-changers. Halwais or confectioners 2560, but about 2000 of these have become ploughmen, and of these a few also trade in grain. Betle sellers 40. The Malis (Gardeners) who remain Pagans, for a few have embraced the faith in Muhammed, amount to about 210. The Kandu, although reckoned among artificers, in strict propriety should be considered as labourers of the soil; for it is the women alone, that parch grain, and the men cultivate the land, but chiefly as day labourers. They amount to 2300.

The agricultural Sudras of pure birth are considered to be as follows. The industrious tribe of Kairis amount to about 30,000 families, of which 11-12ths are said to be Kanjiyas. The Kurmis about 17,000. The Dhanuks in this district are not slaves, but their number is trifling being only about 320.

Of the next rank of Sudras, who carry loads on their shoulders, we have the following. The Rawani Kahars, amount here to about 6500, chiefly employed in agriculture, but perhaps 600 of these are entirely domestic servants. A large proportion are slaves, but many have now become entirely free. They live pure, except in the point of spirituous liquor, to which they are very much abandoned.

The Torhas amount to about 700. They cultivate the ground, carry the palanquin, and occasionally fish. Although admitted to be pure, they eat pork, which abomination the Rawanis reject. The Dasanamis are their instructors, and the Dihuwar Brahmans perform their ceremonies.

In this district great confusion prevails concerning the Kharwars or Kharowars, because in different places they have in very different degrees adopted the rules of Hindu purity, and have therefore been placed in very different situations of life; some of them are mere labourers, intermixed with various other tribes, and live by agriculture and carrying the palanquin; others have very considerable estates, and rule many Brahmans and Rajputs; while some occupy the table land almost totally unmixed with any other tribe, and there is little reason to doubt, but that they are its original inhabitants. These have retained the features, by which the aboriginal tribes of the Vindhyan mountains are distinguished, just as entirely as the inhabitants of the Rajmahal hills, although, so far as I can learn, the whole Kharwars, both of this district and of Ramgar, speak an

old or corrupted dialect of the Hindi language. Some of the principal men among the highlanders of this district have been induced to live a pure life; but by far the greater part eats buffaloes, pork, and fowls, and I am assured by Banakhandi Singha, a very intelligent person in Sangyot, who has more influence over them than any person in the low country, and who is thoroughly acquainted with their manners, that once in three years a great sacrifice is made, at which an animal of the ox kind, a hog, and a fowl are offered. These highlanders call themselves Suryabangsis or descendants of the sun; and as their hills would at one time appear to have been the residence of Rohitaswa, a prince descended of Surya, their claim has some shadow of support; but notwithstanding it appears to me exactly on a footing with that of the Bhungihars of Bhagalpur; for I think it probable, that Rohitaswa and other persons of the family of the sun were of foreign extraction. It would however appear, that a great part of the country immediately south and west from their hills, has for ages been the property of persons belonging to this tribe, although it has not there had the exclusive occupancy of the soil. The unmixed Kharowars, who occupy the table land amount to 770 houses, and those, who occupy the plains intermixed with other labourers, to about 2230 houses.

The tribe of palanquin bearers, including Parihar Rajputs, Rajbangsi Bhars, and Rajbhars, amounts to about 500 families. Descending a little lower in the scale of pure Sudras we have four tribes.

The Gop of the sacred language are in this district called Ahirs; but do not differ in their manners from the Goyalas of Behar, only, as they are suspected of being thieves, a good many as usual are employed for watchmen. In all there may be 19,200, of whom 2600 adhere to the duties of their profession, tending cattle and preparing and selling milk and cowdung.

The Gangreris or blanket weavers and shepherds, amount to about 530 houses, and very seldom cultivate the ground. The torch makers and carriers, 430.

Of the Khattiks only one family remains Pagan, for I have no doubt, that the Kungjras, now all Muhammedans, originally belonged to this tribe. To the first class of impure Sudras belong five tribes. The potters 1200.

The Lohars 2400. They are all of Kanoj, except 100 called Laori. This term is a vulgar name for a female slave, nor can the Pandit give any other explanation. I suspect rather, that it is a careless orthography for Lahor, a well known country, from which these families may have come. The Lohars adhere to their profession of blacksmiths, but many of them encroach a little on the business of the carpenters, by making the wooden parts of the implements of husbandry. The carpenters 900 houses. The Laheris, who work in lack, 30.

In this district, the fishermen called Malo, live but a small part of the year by this profession, or by the management of boats; and are almost all cultivators, who in the seasons catch fish or keep ferries. As in Behar some are considered as in the dregs of impurity, while others are altogether vile. The former reject pork, the latter eat it, but why this should

create a difference, I cannot say, as several tribes here allowed to be pure grant themselves this indulgence. Of those merely impure there are two tribes. The Suriyas amont to 70. The Mariyaris to 240.

The lowest class of fishermen consists of eight tribes of the same rank, with twelve tribes of day labourers and artists, as follows, beginning with the fishermen. Of the Tiwars there are only 5. Of the Chaing there are 220 families.

The Bindu are divided into two kinds; of which one, amounting to 360, contains fishermen; the other, containing about 100, is composed of Beldars or workers with the hoe; both are in fact farmers, and, I understand in this district are considered as the same tribe.

The hoe men (Beldars) include besides about 350, of which three-fourths could make saltpetre, but all have not employment, and all act as cultivators. The remainder called Khatawas are ditchers, but they also live chiefly by agriculture. The tape makers, who continue Pagans, are of two distinct tribes, 60 are called Goriyas, and have no communion with the others.

The second class of Pagan tapemakers are Yogis, and during the government of the Siviras, were probably the priesthood of the country; but I have not yet been able to procure any proper account of this curious people. Some of the Yogis are also weavers, the whole in this district amounting to about 130. Oilmen, 3000 houses; 200 live by trade.

Sungris, 6200, of whom 2200 live entirely by agriculture, and 4000 by trade, to which a few annex the distillery of spirituous liquors. The Pasis, who extract palm wine, 200.

In most places, that I have hitherto visited, the falconers (Sikari) have become Muhammedans, but in this district about 90 remain Pagans. The Cheros, once lords of the Gangetic provinces, and whose sovereign was probably king paramount of India, are in this district thrust into the lowest dregs of impurity, with the falconers, and in fact the 70, that are now supposed to remain, conceal themselves chiefly among the woods at the bottom of the precipices that surround the table land of the Kharwars, or in the woods of Jagadispur. They live chiefly by agriculture, by cutting timber and bamboos, by collecting drugs, and by killing game; yet they still continue to create a Raja for each small fraternity of five or six houses, and place on his forehead the usual mark (*Tika*). Their features are strongly marked, as belonging to the aboriginal tribes of the Vindhya mountains, but in this district they speak only the Hindi dialect, and this also is, I am told, the case with many of those in the Ramgar district, where they are said to be still numerous. I have however been assured, both by some of them who have gone so far as the lesser Nagpur, and by some persons of different tribes who had come from thence, that in these wilds the Cheros speak a language, that is intelligible to themselves alone. All of them, that I have seen, say, that they live exactly in the same pure manner as Rajputs; and that those of Palama, who are rich, wear the thread, although the poor do not. But the Brahmans allege, that the Cheros live as impure as the highland Kharwars, still remembering the time, when the princes of this people supported the heretical Buddhas.

To proceed to the vile castes, whose manners resemble those mentioned in Behar, I begin with four tribes called Kirats, the ancient subjects of the abominable Cheros. The Musahar amount to 1030 houses. The Rajawars mentioned in the account of Behar, 100. Twenty-five families of the Dhanggars have settled on Rautas. The Dosads are very numerous. They are almost entirely occupied in agriculture, and are not considered as thieves, 8900. About 80 per cent. may be of Maghadha, 9 per cent. Kochaniyas, 4 per cent. Kurins, 3 per cent. Gorar, 2 per cent. Dhar, 1 per cent. Palawar, and an equal number Bhorar.

I now proceed to the artists reckoned abominable. The washermen (Dhobi) amount to 1200. The Chamars, or workers in hides, are in this district very numerous, but the greater part of them have betaken themselves to agriculture, as has also happened in some parts of the coast of Malabar, where indeed the greater part of the cultivation is carried on by this tribe named there Charmar, with less deviation from the Sangskrita than is used in the north. In that country, as wherever the Tamul language prevails, most of the agricultural tribes are of the lowest dregs of abomination, and are slaves, but that is by no means the case on the banks of the Ganges. The Chamars amount to about 8200.

The ordinary workers in bamboo and rattan in this country are divided into two classes. The former do not remove dead bodies, nor act as public executioners, and may amount to 30 families; the latter perform both disagreeable offices, and amount to 260 houses.

The Hulalkhors, or sweepers and scavengers, who close the list of abomination, and who have not embraced the faith of Muhammed, although it is uncertain, whether they have any other, amount to about 250 houses.

It must appear evident from the enumeration of the tribes, that those of Kanojiya have fully as much possession of the country as the Magadhas have of Behar; which confirms the opinion of those who maintain that this country was never a portion of Magadha, although no doubt it was at one time subject to the princes of that country. Notwithstanding this extraction from Kanoj, and the great proportion of Rajputs in the population of Shahabad, it must be observed that the west country fashion of the women's wearing petticoats has made much less progress here than in Behar, owing, I presume, to a greater degree of poverty. Although this district was also nearer the royal residence than Behar, the Persian language has made much less progress, and the number of Moslems is much smaller than towards the east.

It must also be observed that the use of pork is not considered as so degrading as further east, several tribes of Sudras admitted to be pure making no scruple of eating this food, while in Behar it is done by the Goyalas alone, and that only on a particular occasion. There are, however, in this district

a greater proportion of those who reject altogether animal food, owing to a greater prevalence of the sect of Vishnu, and of those who, being in search of heaven by new routes (*Panth*), as usual assume more than ordinary austerity. No Hindu women, except of the very lowest dregs of abomination, and even very few of these, smoke tobacco; and the men are not so much addicted to spirituous liquor; more, however, probably from want of means than from inclination.

Marriages are apparently much on the same footing as in Behar; and the most important difference is, that in this district the girl, after marriage, always resides with her husband, and among the Paramark Rajputs, so soon after 10 years of age as the astrologer can discover a propitious time, the marriage is consummated.

In this tribe wives are not permitted to see father, mother, sister nor eldest brother; but they may see their younger brothers. The wives of other tribes are permitted to see their kindred; but these are never allowed to eat in the husband's house, nor are the wives permitted even to drink water out of her kindred's hands. The reason assigned for so barbarous a custom is, that the wife, giving up all connection with her own kindred, may become entirely devoted to the interest of her husband. The expense of the ceremony, as I have said, and the difficulty of procuring suitable matches often induces the high tribes to defer the marriages of their daughters until they approach the age of puberty, and even sometimes still later, although every possible exertion is made to avoid the latter circumstance; as it is in general supposed to be unfavourable to morality. The low tribes marry when mere children of five or six years, and young women are preserved from wantonness by being taken into the family as concubines (*sagai*).

The custom of widows burning themselves alive is here very common, especially in Biloti; and in almost every manor are three or four places marked by a truncated cone of clay, where the horrid sacrifice has been performed. At these places Sat chauras, or Siras, women of all ranks continue to make little offerings, and the relations of the victims keep the monument in repair. It would be considered as far beyond the dignity of a man to pay them any respect. The ceremony is not confined to any rank, although among the higher castes

it is most common. I heard, however, of a Musahar woman who had thus sacrificed herself. It is not always that a priest of any kind attends to read or perform mummeries; and eagerness for the sacrifice overlooks many irregularities. This year, for instance, a military Brahman died in the division of Ekwari, and his widow burned according to the regular forms; but his son dying soon after, the widow allowed the corps to be burned, and even the ceremony called Sraddh to be performed on the eleventh day afterwards. Next day, however, she caused a pit to be filled with fire, and threw herself into it according to the ceremony called Anumrita. This was quite irregular; first, because she was a Brahman, and Sudras alone are permitted this indulgence; and secondly, because it ought only to he done when the husband died at a distance. Notwithstanding these irregularities, the Brahmans made no objection to perform the ceremonies; but she would perhaps have burnt herself, had they even declined to attend. She had probably in the interval experienced some of those affronts to which Hindu widows are so liable; and the women of rank here are said to have the most haughty and violent tempers. The annual number of victims may be about 25. The contagion of example has even extended to the Muhammedans, and I heard of the widow of a weaver, who had buried herself alive in her husband's grave.*

Here, as well as in Behar, many of even the high castes do not trouble themselves with taking instruction from the sages; at least, until they are above 40 years of age; but in this district the number of such negligent persons is not so considerable in proportion to the number of inhabitants, the Rajputs being more regular than the military Brahmans; still, however, a fourth of the whole adults may have adopted the usage. Of the four sects now reckoned orthodox, the following may be the proportions:—Saivas, 267; Saktas, 368; Nanaks, 208; Vaishnavas, 156.

* The efforts which I made in India (and which, before I left Calcutta, were successful,) for the abolition of this horrid rite, by the publication of a Journal in four languages, addressed to all classes of the natives, is one of the most gratifying events of my life. It is justly due to the memory of the late Rammohun Roy to state that to his aid, in conjunction with that of the noble-minded Dwarkanaut Tagora and his able and estimable cousin, Prussunu Comar Tagore, I was materially indebted for the success of my labours in 1829.—[Ed.]

The term Grama devata, or gods of the manor or village, is here scarcely known, but the term Dihuyar, perfectly analogous, is in general use, although Gango Yak, or treasurer of the manor, is a term also employed. In almost every true (*Asuli*) manor, that is to say small division of territory, that has heen long established in the revenue accompts, is a (*sthan*) place dedicated to the worship of the deity, who is supposed to have the chief influence there, and this influence is thought to be generally exerted in causing evil.

Besides the daily prayers offered to the favourite god, and the sacrifices and offerings made to fear and the appetite for flesh, bathing in certain holy places, and pilgrimage as in Behar are here the most common forms of Hindu worship. In the topography have been mentioned the various places in the district, that are frequented, and the number that usually attends. The pilgrimage out of the district, to which most people resort is Dadri, in the province of Benares, and no less than 84,000 people are said to attend from this district; but these go almost entirely from the vicinity, while none attend from the more remote parts of the district. About 20,000 are supposed to go annually to the great fair at Harihar Chhatra opposite to Patna, and celebrated at the same time with that of Dadri, almost all these again go from the corner of the district nearest the place. Whenever an eclipse happens, about 1,700 people go to Benares. This year, on the occasion of a solar eclipse, it was supposed, that more than double that number attended.

On the 6th day of the moon in Karttick, many women here fast all day, in the evening they go in procession with music, and sitting down by some pond or river, at sunset make offerings to the great luminary. They continue sitting there all night, and do not eat until sunrise, having fasted 24 hours. This holy day is called Chhatka Bharat, and is observed also in Behar. In Bengal it is not known.

The Charakpuja* is not known in this district. None of the Sudras are permitted to read any book composed by the gods or Munis; and none of the Vaisiyas nor Kshatris give themselves the trouble; nor indeed do the sacred order bestow

* Swinging in the air suspended by hooks passed through the fleshy part of the loins.—[Ed.]

much study on these works. At some of the principal towns, however, a few Brahmans expound parts of the Purans, as in Behar. Oaths are on the same footing as in Behar. Owing probably to the want of proper means for determining petty suits, several images are resorted to for the purpose, and the priest administers to the defendant an oath denying the validity of the claim. If he takes the oath, the claimant is dismissed as unreasonable.

In this district a new route to heaven has lately been discovered by a Muhammedan tailor, who rejected the prophet, admitted the Hindus into his society, and took the name of Dariya Das; but he is often called the Panth, or the path, and offerings are often made at his grave, but only in the name of the deity; for the tailor had sufficient modesty to abstain from claims to a divine nature. Except this grave however, the sect has nothing, that can be called a temple; but the house where he dwelt at Dharkandha in the division of Karangja, is called his throne *(tukht)*, and is occupied by Tekadas, who succeeded Gunadas, the favourite pupil of the tailor. Tekadas is called a Mahanta, and two other persons enjoy the same title; but the places of their residence are called merely their abodes *(mokam)*. One is at Dungsi in Betiya, the other at Telpa near Chhapra, both in the district of Sarum. Annexed to the three Mahantas are about 70 persons considered as of the sacred order, and called Das (servants) and Chela (pupils); and these are employed to wander about making converts, and levying contributions. At Dharkandha they have 101 bigahs of land free of rent, conferred on the apostate by Kasem Aly. Hindus of all ranks and Moslems may be admitted into the priesthood, and after this they all eat in common; and they will eat from the hand of any layman, who has adopted their doctrine; but they reject the food of all heretics. Of the three priests, from whom this account was taken, one had been a Rajput, another a Kaiastha, and the third a Kurmi. All the priests reject women, abandon their kindred, and shave their heads. They indulge however in smoking tobacco, and a peculiar kind of implement *(ratna-nalita)* used for that purpose, and a pot for holding water, are indeed considered as the badges of their order. They totally reject spirituous liquors, and animal food, considering all animals as portions of the Su-

preme Deity, whom they call Satya Sukrit. They do not deny the existence of the Devatas; but say, that they are all created by the Supreme Being, who is the only legal object of worship. They have no images, but make offerings of fruit, sugar, milk and the like, placing them on the ground, and calling on the name of God. They reject bloody sacrifices, and the offerings by fire *(hom)*, that are considered by the Hindus as one of the most essential marks of orthodoxy; nor do they give their followers any secret form of prayer. The dead bodies of the priests are buried. The priests can in general read and write the Hindi language; but know little or nothing of Sangskrita science, which they despise; and they entirely reject the authority of the Vedas and Purans. They reject also the Koran; and allege, that all useful knowledge is contained in the 18 books composed by Dariyadas. The priests however as usual allege, although these works are composed in the Hindi language, that their meaning is rather obscure, and that few arrive at a knowledge of the whole. They made no scruple of showing the books to me, to the Pandit, and to my native assistants, although we were avowed infidels, nor are the laity of their own sect excluded from the perusal; but the priests did not consider it decorous to sell any of the books, and said, that I might be supplied by any of the laity, from whom such reverence is not expected. The Pandit however failed in attempting to procure any of these works.

Those with whom I conversed, seemed to think, that in all, the three houses may have about 20,000 lay followers. These receive no secret form of prayer, but are taught to worship Satya Sukrit alone, and to abstain from animal food, and spirituous liquors. They are promised, that by this means they may obtain an union with god; and threatened, if they are neglectful, with being born again as persons full of trouble, or even as base animals; but a hell, or place appropriated for the punishment of the wicked, is not believed. Although they declaim violently against the killing of all the lower animals, they are neither so mad, nor such knaves as to cry out against the unavoidable evil of war, or the profession of a soldier; nor, although they condemn the practice, do they think it convenient to hinder the widows of their followers from burning themselves alive; in this country that would be

bringing on their sect an indelible disgrace. Their lay converts, whether Hindus or Moslems, are allowed to follow the original customs of their tribe in funerals and marriages, so that the latter bury their dead, and are married by the Kazi, while the Hindus burn their dead, and both then, at marriages, and at other usual solemnities continue to employ their Purohit to perform the ceremonies.*

The exercises imposed on young Brahmans, before they take the thread, are not more severe than in Behar; and during the day wasted in this manner, they are called Brahmaiharis. In travelling through the district I met with a Sakadwipi, who had taken this title, and was proceeding in search of celebrity with more severity. He contrived to support himself on his head, neck and shoulders, so as to keep his body and legs in the air, and in this awkward posture he meditated on divine things during the whole day. He said, that, when he had completed his exercises in this valuable way, he intended to pass a cold season in the Ganges, with his head only above water. He followed my party for some days; but finding that he was laughed at by the Moslems, and that even the Hindus began to suspect his hypocrisy, and to ask why he performed his penances so much in public, he left us, in search of a more manageable flock.

A gymnosophist *(Paramahangsa)* has seated himself at Dumraong, and observes strict silence. He eats whatever is put into his mouth by any person; but none of the canaille are permitted to approach; not that he interferes in the least, but persons of rank would not tolerate the abomination. In cold weather they cover him with a blanket, under which, as in all other circumstances, he remains perfectly passive, passing his whole time in meditation on divine things.

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* The description of this sect or *Panth*, has been given at length as an illustration of many others existing throughout the country. Indeed, of late years, sectarianism has spread widely in India, particularly among the once orthodox Hindoos, not a few of whom are passing from the grossest idolatry into the abstract nonentities of deism If no injudicious efforts be made the idols of Paganism will gradually be broken, and the ground prepared for the pure seeds of Christian principles.—[Ed.]

CHAPTER IV.

ANIMALS, VEGETABLES, MINERALS, ETC. OF SHAHABAD.

Tigers, bears and monkeys are as numerous as in Behar. The Kohiya or wild dog is evidently very distinct from every species described by Linnæus, Buffon, Gmelin, Pennant or Shawe. In its manners it more resembles the dog than any other species of the canine tribe; but in its external appearance, both shape and colour, it comes nearer the European fox: it is however larger, and the end of the tail is bent down like that of the wolf: it may be distinguished from other kindred animals by having a compressed tail, in which respect it resembles the hunting leopard; and this circumstance, no doubt, gives both animals a power of turning with great rapidity when in full pursuit of their prey.

The jackall is very subject to hydrophobia, and in this state often attacks men, to whom it communicates the disease. Hares are exceedingly numerous. Neither wild elephants nor rhinoceroses are known. The Sombar or Sawar, is the large brown deer, like the stag, which has been mentioned in the account of Ronggpur. The Bhojpur Raja had one of the males tame, and assured me that it never acquires more than two branches to each horn, one near the brow, the other near the extremity. This not only agrees entirely with what I have seen, but, as the Raja is a very keen hunter, confirms my opinion of this animal being a distinct species from the red deer, which on account of the greater number of branches on its horns, is in some places called Baro Singga, or the twelve-horned deer. The Sambar chiefly frequents the hilly parts of this district, especially the narrow and winding recesses in the sides of the table-land. The red deer, so far as I could learn, is not found in this district; but the Sambar is a still more noble animal, and among the Kharwar of the hills is rather classed with the cow than with the deer. The Axis or spotted deer is found in all the woods of the low country. The Porcine deer is also found among long grass in the skirts of woods, and is a species worth rearing, as it is very easily rendered familiar. In the woods of Jagadispur I

heard of a black deer (Kala Harin), which may perhaps be the male of the animal next mentioned; but at the menagerie I once procured a black coloured deer, said to have come from the west. Except in colour, this strongly indeed resembled the Porcine deer, but was larger, and if not a distinct species, must be considered as a remarkable variety. The *antelope cervicapra,* or common antelope, is either the most common of these animals, or from its frequenting open plains, is the one which the traveller most usually sees. In the low lands of the Tilothu division, the most common deer is said to be the Kotara; but I could procure no specimen, nor did I see any running wild. I should have supposed that this is the same name with Kotar, the appellation for the female porcine deer; but the people assure me that its horns have no branches, in which case it must be an antelope. It differs however from the common antelope, or *cervicapra,* in its horns being not spiral. It is smaller than the Axis, and lives hid among the woods at the bottom of the hills. It is only seen in the hot weather of spring, when it comes at night to the river Son in search of drink. The people then lie in watch, and shoot many. The animal, which at Shahasram is called Chhikara, is probably the same; as the people said that it has small horns, and does not live like the Kalasar (*antelope cervicapra*) on plants, but in the forests at the root of the hills. They say also, that it less than the axis: it may however be the porcine deer. In the same vicinity is found a deer with four distinct undivided horns, which, in many other respects is said to resemble the Kalsar. It is called Chauraha, but I could procure no specimen.

The Ghoraraj, mentioned in the account of Bhagalpur is no doubt the *antelope picta* of naturalists, or what the English in India call the Nilgai. This name, signifying a dark coloured cow, is not in use among the natives of Behar; nor do I know from what part of the country it has been brought. At any rate it is a very bad term, not only as the animal is not a cow, but as the female is red. The same is the case with the young male, and this circumstance induced me to suppose it to be at least a variety of the *antelope picta;* but I had here an opportunity of observing in the same herd, the red colour of the females, and the dark colour, approaching to black, of the adult males. A similar difference of colour,

it must be observed, takes place in the common antelope. In this district the Ghoraraj is found only on the table land. The same is the case with the Gaur, or animal of the tribe of Bos, mentioned in the account of Bhagalpur. The people here also know it by the name of Gaur, but they usually call it Harna, the name given in Bengal to the wild buffalo. From the horns shown by the Kharwars, I know that their Harna is the same with the Gaur of Bhagalpur. In general it frequents the thickest woods, nor could I induce the Kharwars to undertake a hunt while I was on their hills. They alleged that it would be then totally useless, and that they never saw the animal except in the heats of spring, when all the woods are burned, which compels the Gaur to leave his usual haunts, and to repair to the few springs then containing water. At that time the Kharwars lie in watch and shoot him; but with great fear, as the animal is very formidable, both from strength and ferocity. It usually goes in pairs.

In the woods of Jagadispur and Dumraong are some wild cattle (Bos Taurus) of the common breed; they resemble entirely in form and in variety of colours, those bred about the villages of this district, but are more active, and very shy. The Raja of Bhojpur, and his kinsman Sahebzadeh Singha, carefully preserve them from injury; and say, that owing to the encroachments of agriculture the number is rapidly diminishing. Many of their neighbours, however, alleged that the devastation committed by these sacred herds was very ruinous, and every year occasioned more and more land to be deserted. The origin of these herds is well known. When the Ujayani Rajputs incurred the displeasure of Kasem Aly, and for some years were compelled to abandon their habitations, some cattle were left in the woods without keepers, and on their owners' return had acquired the wild habits, which their offspring retains. Several calves have been caught; but it has been found impossible to rear them, their shyness, and regret for the loss of liberty, has always proved fatal. This shows what difficulties mankind must have encountered in first taming this most useful animal; and it should prevent those from despairing, who in the attempt to domesticate wild species of animals, may meet with frequent disappointment. Many of the larger and stronger species of antelope with which Africa especially

abounds, might be found in the highest degree useful, could they be rendered as tame as the ox, and this might probably be effected with no greater trouble than our forefathers had in subduing the stubborn and ferocious temper of the wild bull; but this valuable treasure, left us by our ancestors, has rendered us less industrious, so that we neglect the animals which a more extensive knowledge of the world has brought within our reach. It is not indeed probable that any species would on the whole be found equally valuable with the ox; but in many countries food fitted for supporting that animal is scarce, and there other breeds of tame cattle might be highly important.

Although, as I have said, there are a good many families of professed hunters, yet venison is seldom sold; but the Karwars on the table land, and many farmers near the hills, pursue the deer and other large game for their own use; and the Rajas are eager for sport. The matchlock is the implement of destruction commonly employed; nor did I hear of any nets. Hares are killed in every part, whenever it is intended to give a feast. The difficulty which I had in procuring specimens of the deer probably arose from an order that was passed some time ago to disarm the people, but which has never been strictly enforced. They were, however, unwilling before me to show an open violation of the law; and, as I have said, the matchlock is the chief or only means by which the natives here procure the larger kinds of game. The other animals are similar to those of Behar. Otters and porpoises are numerous.

Birds of prey are numerous, and a few, of small kinds like sparrowhawks, breed in the country; but most of those intended for sport come from Nepal. Partridges and quails are what they chiefly pursue; even with the falcon and with smaller hawks they pursue the Salika (*Gracula tristis*). Neither afford good sport. The birds are so much afraid whenever they perceive the hawk, that they dart into the thorns, and allow themselves to be taken by the hand rather than rise. The only pursuit worth notice that I saw in several days hawking was from a large bird of prey named *Jimach*, which attacked a very strong falcon as it was hovering over a bush into which it had driven a partridge. The moment the falcon spied the Jimach it gave a scream, and flew off

with the utmost velocity, while the Jimach eagerly pursued. They were instantly followed by the whole party, foot, horse, and elephants, perhaps 200 persons, shouting and firing with all their might, and the falcon was saved, but not without severe wounds, the Jimach having struck her to the ground; but a horseman came up in time to prevent her from being devoured. I have never been able to procure a Jimach; but it appears to be a small eagle, and is said to live entirely on other birds of prey. Partridges and quails are much sought after for eating, and are very abundant. Peacocks are also numerous on the precipices which bound the table land; but, owing to the dryness of the country for the greater part of the year, water-fowl are scarcer than in any part of northern India that I have yet visited. Parakeets are very numerous. Some kinds of crane are the most destructive birds in this district, and are very numerous. There are several sorts of singing birds.

In the Ganges there are tortoises, but they are seldom eaten, unless it be by fishermen; and I had no opportunity of making any new observations on this subject. In the Ganges both kinds of crocodile are common, and it is said that the Karmanasa abounds with these terrible reptiles. In the Son there are some, but not many. No one pursues them. On the plains serpents are very numerous and dangerous. I am told that on the table land they are seldom, if ever, seen; and even in the vicinity of the hills they would appear to be usually less destructive than towards the north. In some seasons it is alleged that they are much worse than others; for instance, at Shahasram, where from 20 to 25 people only are usually killed by them in the year, it was alleged that last year not less than 100 perished. According to the reports which I received, these reptiles may annually kill from 130 to 190 persons.

Except on the banks of the Ganges, where there is a good supply from the middle of October to the middle of June, fish are everywhere very scarce, and in general also of a very poor quality. The small channels between the Son and Ganges, near their junction, form the best fishery in the district, as it gives a regular supply throughout the year. In the Son there are a good many fish, and their quality is excellent. Shells for making lime are abundant towards the

Ganges. This lime is chiefly used for chewing with betle. What is wanted for building is made from limestone, which abounds in the hills.

PLANTS.—In none of the districts which I have hitherto surveyed have I made so small an addition to my collection of plants; for, notwithstanding the numerous woods and wastes, scarcely any plants were in flower when I visited the district, and almost every thing that I met had been previously seen. The whole of the inundated land that is waste, exclusive of roads, banks, and unavoidable corners, amounts to only two miles, and is covered with reeds and bushes of the tamarisk common on the banks of the Ganges. I saw none of the rose trees so common towards the east. Of the level parts exempted from regular inundation which produce ligneous plants, there are about 343 square miles, of which about a third part may be covered with bushes, and two-thirds with forest. In the greater part the bushes grow on poor dry land, and are thorns, chiefly different kinds of *zizyphus;* but in some parts, where the soil is good, the bushes consist of the Paras tree (*Butea frondosa*) in a very stunted state. Of the 764 miles of hills and table land that are waste, about 500 are woods. All the causes mentioned in the account of Bhagalpur, as tending to keep the woods in a stunted condition, operate on those on the hills; but the extent in proportion to the demand being much greater than in Behar, the woods are not so much affected. On the plains again none is cut for occasional cultivation, the woods are not burned in spring, and some are carefully preserved. In some of these the trees are of a tolerable size; but one of them, consisting chiefly of Khayer (*Mimosa catechu*), does not attain a considerable height; and by far the greater part is stunted by cutting for fuel, and for the sticks used in the houses of the natives, and in making the implements of agriculture. In such parts of the forest near Jagadispur and Dumraong as are not preserved for hunting, several of the trees are stunted by pruning the branches to give them to cattle for forage. On the whole, even the woods that are preserved do not by any means arrive at a stately size; nor do I think that in the whole district there are 10 fine trees, except such as are in plantations, which are however very numerous and stately. The woods, however, are sufficient

to supply the country with the few posts, beams, and planks required by the natives; but an European could not procure materials to build a very ordinary house, according to our construction. The palaces that were built by natives consisted entirely of stone. The observations which I have made on plantations in the account of Bhagalpur and Behar are applicable to most parts of this district, where mango trees in particular have been multiplied to a most absurd length.

A few cocoa-nut palms have been planted as curiosities. I saw one or two of them loaded with young fruit; but it was said that it would not ripen. The Khayur palm is very scarce. The Tar or Tal palm is more common. The same confusion prevails here, as in all the districts hitherto surveyed, concerning the term Gambhar. At Arah the *Trewia* with smooth leaves was called by that name; but in the woods of Jagadispur the Gambhar, although used in medicine, seemed to be the *Gmelina;* I did not indeed see the flower, but the leaves were covered by an impalpable powder, by which those of the *Gmelina* may, I believe, be distinguished from those of either variety of *Trewia*.

Near Shahasram and the town of Jagadispur has been planted a very ornamental species of *Bignonia*, which from the colour of its flower I call fulva, for I cannot trace it in any botanical work that I possess, and the people have not given it a name. It has probably been introduced by some pilgrim of the order of Fakirs, who in this respect are by far the most curious among the natives.

The oranges are much superior to those of Behar, and some that I procured were little, if at all, inferior to those of Silhet R. It is chiefly by Muhammedans of rank that they are reared, and by these they were probably introduced from Persia. The tree which Mr. Colebrooke considers as that producing olibanum is one of the most common in the hills of this district; and as in Behar it is called Sale, and its resin is called Salegond or Sale Lassa, nor is it applied to any use. At Chandalgar, however, it is called Biroza, and is commonly sold as a medicine. When collected as it flows from incisions made in the tree, it is a viscid substance of the consistence of turpentine, but of a clear greenish colour. When the resin of the Sale has been allowed to dry before it

is gathered, it forms hard diaphanous masses or tears; but loses a great part of the odour which it has in its moist state, and which is more agreeable than that of the turpentine from pines. The Imli, or tamarind, is much used by dyers. The Aongra of Behar is here known by the same name. It is exceedingly common, especially in poor stony land; and when the woods in which it grows are not annually scorched, it is a very ornamental tree, having a good deal the appearance of the yew, but it is ornamented with vast clusters of fruit, which grow to about the size of small apples, and are greenish white on some trees, and red on others. This is an example of the variation of colour in a spontaneous plant; but such variations are much less common than modern botanists seem inclined to think, and the colour of fruits and flowers of spontaneous plants are in fact a more fixed mark than the form of leaf and the number of stamina.

The *Rotteria tinctoria* is called Kamina, evidently the same name with Komila used in Ronggopur. At Jagadispur the powder which envelopes its capsules is collected for a dye, and is sold by those who gather it at from 3 to 4 paisahs a ser of 44 s. w.; that is, at the usual rate of exchange, for from about 15¾ lbs. to about 21 lbs. for a rupee; but any considerable demand would instantly raise the price enormously, there being few collectors and not many trees. Of the 327 square miles of clear waste land that is in the level country, perhaps two-thirds are covered with the Khatra, a long harsh grass, which is common also in Behar, and is also plentiful in many woods where the trees are rather thin. On the table land the same grass is also common in certain parts; but many others of still less value are intermixed. There remain to be mentioned a few plants that are applied to various purposes.

There is a dwarf species of Phœnix, which has no stem (*caudex*), and which seems to have been known even to Pliny. It grows in all dry situations in India where the soil is stony, or of a hard clay. In this district it is called Palawat, and its leaves are bruised and formed into ropes of a very bad quality. Near Bhojpur, in the old channel of the Ganges, which has been described in the topography, there grow large quantities of a flag called Gongd and Petar. It has the appearance of a *Typha* or *Sparganium*, but I saw only the

roots and leaves. The roots consist of large fibrous masses, which send out shoots that are proliferous, and are eaten by the poor as a succulent vegetable; but the leaves are the part most in demand, and resemble in size and structure those of the *Typha Palustris*. The mats commonly used in all that vicinity as bedding are made of these leaves interwoven. In the middle and western parts of the district, which are best cultivated, and where grass for thatch is distant, the people use for this purpose the leaves of a *Scirpus*, which they call Nerai. I saw only the leaves and root, but am told by natives well acquainted with plants that it is the Godari of the native physicians, which is the *Cyperus dulcis* of Rumph (vol. 6, plate 3, fig 1), called by Willdenow *Scirpus Plantigineus*, although there is no saying whether he meant the Indian or an American plant described by Rottbol, and probably totally different. The Nerai, when I saw it, had none of the bulbs to its root, by which the Godari is known; but the natives say that these bulbs grow at certain seasons only; and they pretend to be sure about the identity of the plants. It grows in ditches and waste corners among the rice fields. Its thatch is very inferior to even the Khatra; but its use is more economical than that of straw, for which the cattle have the most urgent necessity. The climbing plant, called *Ventilago Maderaspatana* by botanists in the woods of Jagadispur, is called Kewagli. From its seed can be expressed an oil that may be used for food; but the seed is there more commonly preserved and given to the cattle. In the dry season the leaves also are an useful forage, and the branches are then loped to bring them within the cattle's reach.

MINERALS.—In this district the mineral appearances scarcely admit of a division: most of what is to be said refers to the hills, which are everywhere of the same structure; and, commencing with these, I shall conclude with a few remarks on such mineral appearances as occur in the plains.

The hills of this district, from the Son to its western boundary consist of as regular horizontal strata as I have ever seen, and the same structure and rocks of the same kind continue, I know, at least as far as Chandalgar; only towards that fortress, the hills being lower and less abrupt, the horizontal disposition is not so evident as in this district, where there are immense abrupt precipices that admirably display

their structure. I must further remark that, although the hills here form one table land, and therefore appear to have a more level summit than those of Behar, which are all either peaks or narrow ridges; yet, notwithstanding the horizontal disposition of their strata, not only the small detached peaks and ridges that are on both the table land, and that are scattered through the plain below, but also the sides of the table land are fully as abrupt and rugged as any hills of Behar, and they are fully higher than the Barabar cluster, which consists of the most entire granite. With the utmost diligence of search I could not perceive the smallest trace of animal or vegetable exuvia in any of the stones, of which they consist, except in one specimen of calcareous breccia, as will be afterwards mentioned.

The great mass of these hills, at least so far as appears on the accessible surface, is a kind of sandstone very fit for building, as, although much harder than our best freestones, it cuts well with the chisel, and is very durable. The stones in the works erected by Sher Shah and his family, from A. D. 1529 to 1545, do not exhibit the slightest mark of decay from the weather. It is much more difficult to break with the hammer than freestone, especially where fine grained. This is particularly remarkable in the small ridge named Maroriya, which forms the boundary between this district and Merzapur, where the stone is fully as tough as hornblende, and it was with the utmost difficulty that with a hammer, weighing about 4 pounds, I could break off a small specimen. The grain is very small, and of a brown colour, and the large masses, where broken, have a very strongly marked conchoidal fracture. The strata are of very various thicknesses, but in general are rather thin, although very fit for building walls; that is, entire masses about a foot thick without flaws or subdivisions are by far the most common, and stones capable of forming large columns, 3 feet in diameter, for instance, are not usual. Very fine ones, however, might be procured in the quarry at Masai, which will afterwards be mentioned. The great demand, however, is for those which are much thinner, about 3 inches being the thickness best adapted for hand-mills; and it is in search of pieces that will readily split into such flags that the workmen are everywhere bent. In general, it must be observed, that the adjacent strata vary a

good deal in thickness; that is, one which is 12 inches thick will have the one adjacent on one side 14 inches thick, and the one on the other side only 10 inches thick; but in the small detached hill called Pateswar, and in the long detached ridge south from it, the strata or flags are of a more uniform thickness than usual, being commonly from 4 to 5 inches, and they break readily square with the hammer, so that walls built of rough fragments of this stone look neater than those cut with the chisel, where the strata, being of unequal thicknesses, the stones have, as usual in the native buildings, been placed without any attention to an uniformity of thickness. In this hill of Pateswar, notwithstanding this uniformity of thickness, the stone varies more than usual, both in the size and colour of the grains. In some parts it approaches near to a granular hornstone, in others it approaches to the nature of an aggregate rock.

In some places the stone is red, although not of so bright a colour as that on the Enrick in the shires of Stirling and Dumbarton; in others it is whitish, but not of so pure a shade as the stone used at Edinburgh; but in most parts it has a colour approaching to brown paper, and is not subject to those ochraceous exudations which have injured the appearance of some houses in Glasgow, built with a stone of this colour. These colours are here seldom, if ever, intermixed, as in the siliceous rock of Behar often happens. The largest masses that I saw were of one uniform colour, but all the three colours are often found in the same vicinity. The only exceptions that I remarked are on the detached hill called Pateswar, which has lately been mentioned, and on the peaks called Bharkuriya, east from the pass of Tarachandi and north from Tilothu, which is also detached. Although the great mass of this last consists of the usual whitish coloured sandstone, there are portions of a larger grain that have different shades of grey disposed in alternate layers without any separation of substance, and which have much the appearance of a very small-grained gneiss. It ought to be remarked, that on Bharkuriya it is the larger grained stones which have the colours disposed in alternate zones, while on Pateswar this disposition is observed on the fine grained stone.

Owing to its hardness, the sandstone of this district serves

not only for building, but is used for the mortars of sugar-mills, for millstones, for potters' wheels, and for the stones used to grind the seasoning for curry; and for these latter purposes a considerable quantity is still quarried. The demand for building is at present very trifling, as few works are carried on in the vicinity, and Chandalgar being close by the river supplies all places at a distance. The stones, however, of both places are exactly of the same nature. In this district I observed that the workmen never dig to any considerable depth, and it seems to be the rocks only near the surface which have been softened by the action of the air and by a partial decay, that are fit for use. Nor is it every part of even the surface that works easily, or that affords large masses of a suitable nature. These circumstances render the quarries less numerous than might be expected, especially in places that are easily accessible. On most parts of the table land, indeed, there is abundance of stone fit for building, which greatly facilitated the construction of Rautas and Shergar, but the bringing stones from thence would be an enormous expense, and the precipice by which the table land is bounded is almost everywhere surrounded at the bottom by a mass of small broken fragments, to remove which would be exceedingly difficult even were good stone to be found on the removal, which is very doubtful, as the lower strata are perhaps nowhere sandstone. In the pass east from Shahasram, at Tarachandi, where both hills gradually slope down to each other without any great overhanging precipice, is the quarry to which there is by far the easiest access; and it is indeed capable of furnishing excellent materials for building to any extent, and with very little trouble. The only other quarry that is easily accessible is at Asman Kothi, near Chayanpur, on a small detached hill that is less abrupt than usual. Why all the quarriers do not work at these accessible places it would be difficult to say; but in many places they prefer going to the top of the hills from whence even the small stones for hand-mills and rubbing curry are brought with much trouble, nor is there any apparent difference between the stones there and at the places which are of easy access.

The finest stones, especially those for the mortars of sugar-mills, which require very large masses, come from a small detached hill called Masai; and, although the quarry

is high, the precipice admits of the stones being rolled down. Most of the smaller stones are procured from various places, Gaighat, Sonpura, Balai, Surai, and Dihira of the table land near Tilothu, from whence they are sent down the Son to Patna. This stone, in breaking large masses, discovers a good deal of the conchoidal fracture, and is nowhere of an uniform substance, but consists of small earthy grains with some of a micaceous nature intermixed. Not only the colour, but the size of the grains, even in the kinds which are reckoned equally good, is subject to considerable variation. In some parts, as I have observed, the workmen find this stone too hard for their purpose, although to external appearance there is little or no difference, only that the softer the stone is, it has usually more of an earthy appearance; and that, which is too hard, approaches in some places nearer in its appearance to granular quartz or petrosilex, and very often contains small nodules of quartz, as at Asman Kothi above the quarry that is wrought, or of other natures as some on Pateswar, the hill lately mentioned. On the detached hill, called Suraiya, towards Chayanpur, in some masses scattered on the hill, these immersed nodules are more numerous and various than anywhere else, that I have seen, and these masses have an exceedingly anomalous appearance, as will be afterwards mentioned. In other places again, as in Jabra, one of the small detached hills towards Naukha, the siliceous stone consists of larger grains, rounded indeed at the angles, but evidently consisting of fat quarts immersed in a powdery matter, which I take to be decayed felspar. This exactly resembles the hard stone in the hill called Kamuya, near Loheta in the Bhagalpur district, although that is in a vertical arrangement of strata, while those of the Naukha hills are most evidently horizontal. In fact I look upon the classification of minerals from the position of the strata, in which they are found, to be quite contrary to nature, and to have arisen from a vague hypothesis concerning the formation of the earth, which is supported by numerous frivolous distinctions, while the most real and striking differences are overlooked.

Far from considering the horizontal or vertical divisions of rocks as arising from different circumstances attending their creation, I am apt to think rather, that they owe their origin

to the decay of rocks, that have been long exposed to the action of various external causes; but in the classification of rocks all such hypothetical conjectures should be most carefully avoided, as only tending to pervert the judgment in the examination of nature. How far this sandstone and other granular siliceous rocks may descend into the earth, I cannot exactly say; because no openings have been made, but I am inclined to think, that they are only superficial, and that they consist partly of aggregate rocks, and partly of siliceous hornstone in a state of decay, the aggregate rock having been uppermost, as in the small peaks of the hills near Naukha, Pateswar, and Bharkuriya, above mentioned, which emerge to no great height from the level. The lower strata of the great mass of hills, in some places laid bare by torrents, or where access could be had to the abrupt rock, would appear to be hornstone. One of the curious reasonings, arising from the above mentioned hypothesis concerning the structure of the earth, is, that because granite and other aggregate rocks form the summits of the highest mountains, (which however is not universally true) they should be considered as the basis of the earth, upon which all other rocks have been deposited. Had we in digging to great depths always come to such aggregate rocks, and never been able to penetrate through them, the argument would, in my opinion, have been more tenable. Setting aside, however, these hypotheses, I would observe, that west from Tilothu, on the summit of the table land, there is a quarry of millstones at Surai in no respect different from the usual sandstone, and of a whitish colour. On descending the precipice, a little way, there is a kind of slate, or very thin flag, which was used by an European in the vicinity to cover the roof of his house, not as slates are in Europe, but in place of the tiles, which in India are placed horizontally on the burgers, and are covered with a terrace of plaster. These slates are about three-quarters of an inch thick, very light, and, although of an earthy appearance, have not the gritty substance of sandstone; but approach nearer to petrosilex in their appearance; and a little lower down the rock is more decidedly of that nature, and still in plates, although too thick for the purpose to which the other was applied. A little south from thence, at the pool sacred to Totala Devi, which

has been already amply described, the rock adjacent to the pool is a hornstone still more clearly marked, and I suspect, that in general such extends everywhere under the sandstone, but is mostly hid by the rubbish which has fallen down, and forms a slope at the bottom of the precipice; but which at Totala Kund has been entirely swept away by the torrent.

This hornstone of Totala Kund is of a dark grey colour with many black micaceous grains, such as abound in the sandstone, and consists of very fine grains, but it has a perfect conchoidal fracture, and is very hard. The gradual transitions from it to the perfect formed sandstone may be admirably traced on the face of the immense rock, over which the torrent falls; and the real nature of the strata is clearly shown not to be essentially different from that of the siliceous jasper, or hornstone, fully described in the account of Behar; that is, it evidently consists of trapezoidal masses, formed by horizontal and vertical fissures. Towards the summit of the rock, where it has decayed into standstone, the horizontal fissures are those that are chiefly conspicuous, and indeed resemble the rows of a well built wall; while towards the bottom, where the rock is most entire, and still a petrosilex, the vertical fissures are the most distinct, although even there the horizontal ones are abundantly manifest, both uniting in the first 60 feet of the ascent to give the trap or stair form to the rock. An inscription carved on this rock has already been fully explained, so far as it tends to throw light on the history of the people; but it is curious also, as throwing light on the history of the earth. It has been usually supposed, that the hills are perpetually suffering rapid decay, and are sweeping with great speed into the ocean; but here we have the naked face of a perpendicular rock exposed to the united action of wind, sun, and water, in the very manner in which these great causes of decay should operate most violently, for between 800 and 900 years. During this long period the letters remain perfectly distinct, nor can the rock have lost one-hundredth part of an inch from its surface. The time required, on such data, to produce any considerable effects on the earth, is so monstrous, as to render the whole hypothesis doubtful; nor has the alluvial earth, swept from the mountains of the countries

longest known in history, been able to fill a corner of the smallest lake, much less to make those changes in the ocean that are supposed to have taken place; nor need it be apprehended, that in a million of years will even Constitution Hill be carried from the good people of London to the Godwyn sands; and much less, that the grandeur of the Alps should suffer a perceptible diminution. Although, as I have said, the appearance of horizontal strata is everywhere in this district most clearly marked; yet the vertical fissures show themselves in many other places besides Totala Kund, and in some parts have separated from the surface of a perpendicular rock large masses, which stand thus insulated in the most fantastic manner, and threaten to overwhelm whoever approaches their tottering basis. One of the most curious of these is at the precipice bounding on the south ditch at the Kathotiya gate in Rautas, where a chasm, not above 1½ foot wide, separates to a considerable length a thin mass of rock at least 100 feet high. Yet it is evident, that this chasm existed in its present state when the works were built; nor is the separated rock above a few feet thick.

The siliceous hornstone, as forming the stratum under the sandstone, may be also traced in some other places at a considerable distance from Totala Kund, supporting the opinion, which I have stated, that the sandstone in a great measure has originated from the hornstone acted upon by various causes of decay. At Yadunathpur the rock immediately contiguous to the Son is a petrosilex, divided into cuboidal masses by fissures some running east and west, some north and south, and others nearly horizontal, but having a slight dip to the south. Where most entire, this hornstone is of an uniform colour and substance, and more perfect than that of Totala Kund; but the greater part is much decayed, and is crumbling into fragments like dry clay. In these the substance has been divided into thin layers of different colours, and curiously waved. In most parts not only the larger masses, but the fragments, into which these are crumbling, are cuboidal. In one place, however, I observed it dividing into vertical plates running east and west. In the northern face of the hills I did not indeed find the siliceous hornstone forming a rock; but the channel of Gupteswari, in the deep recess behind Shergar, contains nume-

rous siliceous stones, among which are many fine black masses, that serve for touchstone; and among these I procured a piece of colourless rock crystal.

Next to siliceous stones the calcareous are in these hills the most common. In general the limestone is found in the part of more moderate ascent, that is at the bottom of precipices, by which the table land, and detached ridges are surrounded; but I have not been able to ascertain, whether strata of it penetrate under those of the sandstone, or whether it is only placed adjacent to the siliceous matter. I think however, that the former is the most probable opinion; for it is found very far up in the recesses behind Shergar, and in that, through which the Karmanasa flows, and the former reaches very near the centre of the table land. Besides being found in these deep recesses towards the centre of the table land, it is found in many parts of the lower declivity, which surrounds the table land on its eastern and northern face; but I saw none on its southern. The whole of the little detached hill named Murli, which stands north-east, at a little distance from Rautasgar consists of this material, and it is found also on the lower part of a small hill called Suraiya, which is detached at a considerable distance from the north side of the table land. Being thus found round and among the sandstone, towards the lower part of the elevations consisting of that substance, it may be conjectured, that it penetrates under it from one place to the other; but, although in the places, where it has been wrought, I could perceive, that the rock higher up the hill was siliceous, yet I nowhere so evidently saw the limestone running under the sandstone, as the petrosilex does at Totala Kund; and, as I have said, the calcareous matter may be only adjacent to the siliceous rock, and may neither pass under it, nor be supported by it; although in one place, as will be afterwards mentioned, there is reason to think, that the latter at least is the case. In different places the calcareous rock assumes very different appearances, which I shall now describe.

The most common form is that called Gati by the natives. It is the most compact limestone that I have ever seen, the grains being perfectly impalpable, and the fracture conchoidal, while it emits fire copiously, when the rock is struck with a large hammer, and it is very difficult to break. It is in gene-

ral of a very dark grey or black colour, and from its first appearance I could scarcely convince myself that it was not hornstone. It burns however into very white good lime, with which all Patna and Shahabad are supplied. In some parts it contains white veins, and in others it is composed of various zones of different shades of grey, cinereous, red and white. The white matter has always a crystallized structure; but where the zones of different colours prevail the grain is usually larger, and of a more earthy appearance, than when the colour is uniform. A second kind of limestone consists of whitish opaque crystals, closely compacted together like the sugar candy of Europe, but small and quite irregular in form. On the surface, so far as has been wrought, it is full of rents and little cavities, that would prevent it from taking a polish; but by digging it will probably be found to constitute a fine marble. A third kind of limestone is the calcareous Tufa often already mentioned. On the plains it is most usually in the form of nodules, but on the hills it more commonly forms a breccia, consisting of a whitish matter in which they are imbedded various fragments of different colours, but all portions of the limestone called Gati. This Breccia, although entirely calcareous, is not applied to use.

A fourth appearance of the calcareous matter is called Asurhar, and is a very porous irregular brown or white tophaceous matter, which looks somewhat as if it had been deposited on mosses, but this arises from its various pores and ramifications being in some places minute; for it has nothing regular in its structure resembling the stems and leaves of these vegetables: yet it evidently derives its form from the liquid calcareous matter having flowed on some figured mass, probably earth intermixed with some broken stems and leaves of plants. It has in fact a strong resemblance to what in the south of India I have considered as a petrified white ants nest; but has fewer and smaller pores, so that its origin or mould must have been different. This makes very good lime. A fifth kind of calcareous matter is stalactite formed by water dropping from the roof of a cave, which consists of the most common kind of limestone. Finally another appearance of the calcareous matter in this district, is that of stone marl, which is called Khari by the natives, and in fact strongly resembles the indurated clays called by that name in Bha-

galpur:* but it effervesces most strongly in nitric acid, and evidently is the compact limestone in a state of decay. It is chiefly used for white-washing walls.

The granular crystallized stone is supposed in modern hypothesis to be of primitive creation, while the compact stone is considered as of a much more recent origin; the Tufa, Breccia and Asurhar are considered as quite modern, and stalactite, I am ready to admit, is now forming. I shall therefore give an account of several of the situations in which these substances were observed, to see how far appearances agree with the above suppositions.

The small hill of Murli, about a mile north from Akbarpur is one entire mass of limestone, about three-quarters of a mile long, and 200 feet high; but the rock extends under the soil of the plain to an unknown length, and at the south end of the hill, where it is wrought, may be traced for several hundred yards. The great mass of the hill consists of the Gati disposed in strata nearly horizontal, but having a dip towards the west. The strata are thin, and in some places have much the appearance of flint; but more commonly they are somewhat earthy, and the masses consist of various zones differing in colour, grey, black, white, red, and ash, but uninterrupted by fissures. In many places their surface is covered by white crystallizations. A little way up the hill are masses of the breccia, consisting of white tufa, having imbedded in it portions of the limestone, the angles of which are rounded.

One of the limestone quarries now much wrought is on the bank of the torrent which comes from Totala-kund, before it emerges from the recess into which that natural curiosity is situated. The right or south bank of this torrent is high and abrupt, and having been in several places undermined by the water, masses of a calcareous breccia have fallen down, and covered the surface. It consists of the tufa involving small fragments, mostly angular, and, so far as I tried, all calcareous; but they are of various appearances, red, grey, ash, and white, the latter always having a crystallized structure, while the others are compact. In some places also earth has been involved, and I saw two small univalve shells, one

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* See vol. ii. book 1.

of which I lost in breaking the specimen; but they were both similar, and although they look calcined, appear as if they had belonged to some of the small snails that are usual among the herbage. Although I broke many pieces, I could find no other remains of animals; but these are enough to shew that this breccia is of modern origin, that is, has been formed after animals had inhabited the hills. It is every where quite superficial. The abrupt bank in many places is earth; but in one place is the quarry of limestone, which is disposed in thin parallel layers, having a dip towards the west of about 40 degrees from the horizon. These layers are partly whitish, partly horn colour, are very fine-grained and compact, with a very evident conchoidal fracture. In some parts they are covered with white crystallizations, and in others the external layers have been coated with the tufa. The lime which they produce is beautifully white. In some places the layers are not so thin, and are rejected by the workmen as not burning into lime, and in fact they scarcely effervesce with the nitric acid, although it produces a slight effect; but in other respects their appearance is exactly similar to the limestone, and they are encrusted in a similar manner by the tufa and white crystallizations, both perfectly calcareous. In fact, they are evidently petrosilex changing into limestone, and are probably connected with the hornstone of Totala-kund, although I could not trace them the whole way to an union. The natives consider them as unripe limestone.

In the channel of the torrent, or imbedded among the pebbles in its banks, are some schistose fragments, which the natives consider as dead lime. They are vastly lighter than limestone, and have a great resemblance to *khari*, or indurated clay, and do not effervesce with the nitric acid, but they still retain a good deal of the conchoidal fracture, and resemble much the lighter coloured zones of the limestone, for they are either of a white or yellow colour. These appear to me to be hornstone, which has been converted into a crust. About a mile north from the mouth of the recess in which Totala-kund is situated, and beyond a little projection from the table-land called Bhalmandra, there is another quarry of limestone of an excellent quality. It is situated nearly under the quarry of millstone called *Surai*, where the whole summit of the hill is a sandstone flag, while the precipice under it, as

I have already mentioned, consists of hornstone slate. On the north side of Bhalmandra are two circular recesses, which have very much the appearance of volcanic craters, being in the shape of funnels, of which one side has given way. The quarry is on the north side of those recesses, about half way up the moderate declivity, that is at the foot of the perpendicular rock. The surface of this declivity is covered with earth, and fragments of the sandstone and hornstone slate that have fallen from above. At the quarry five or six shafts have been made in an equal number of years, for with the first rainy season the roof always falls. In the middle of December the workmen had began to form a new one, but had only effected a narrow horizontal cut into the face of the hill, after carrying which as far as they conveniently could, which would be a very little way, they would sink a perpendicular shaft. The end of their trench was only about four feet high, and consisted of a rotten rock in thin plates, very much resembling the limestone of Totala-kund; but it is considered as useless, although by far the greater part effervesces strongly with the nitric acid; but many parts, like the unripe limestone of Totala-kund, resist in a great measure the action of this powerful solvent, and must still be considered as petrosilex.

The workmen, after sinking their shaft two cubits below where they were working, expected to find two cubits thick of good limestone (Gati), of which they gave me specimens. This is in thicker plates than the limestone of Totala, the pieces being from four to six inches thick, and it has suffered less decay; but its grains are larger and have a more shining appearance: still, however, it has a conchoidul splintery fracture, very much like petrosilex. Below this the workmen expected to find three cubits of a very compact limestone, in plates about half an inch thick, and separated by a white decaying substance: this they call *Chanra*, and never burn, although it effervesces strongly with nitric acid. Below this Chanra the workmen expect to find four cubits of a white substance, which they call ashes (*Rak*); but what had been dug last year, owing to its powdery nature, had been washed away by the rain, nor could I procure a specimen. Below these ashes the workmen expect to find four cubits of Khari, a very fine white stone marl, with an unctuous feel, as if it

contained magnesia. It is exported to some extent, being sent to Patna. An ox load delivered at the foot of the hill, is sold for four anas; the load is about 288 lbs. The workmen dig no farther, but the Khari rests on a whitish siliceous stone, of a granular nature, very like that on the summit of the hill. In some places this stone is stained red. From the account of the workmen it is undoubtedly in large contiguous masses, but whether it forms a regular stratum, or consists merely of blocks that may be supposed to have fallen from the summit, and to have been subsequently covered by the matters now incumbent, I could not from their account venture to assert. This is, however, the place where there is the strongest marks of the limestone being in a regular stratum passing under the hornstone, which is under the sandstone of these hills.

On the small detached hill near Suraiya, north from the table land, at a considerable distance, there are quarries of compact limestone, both on its northern and southern faces. This low hill is of a smooth surface and contains no projecting rocks, but the earth is intermixed with fragments of stone, some of them very large. Above the limestone on its northern face there is very little earth, and the quarry consists of thin horizontal plates covered with an ash-coloured crust, like the Chanra of Bhalmundra. When the plates are an inch or more in thickness, they have a resemblance to flint; but where thin, they have been entirely converted into the ash-coloured substance that incrusts the thicker ones. East from the small trench which has been made to take out the lime, the stones on the surface consist of calcareous plates, of a reddish colour in the centre, but covered with a light-coloured crust, and intersected by veins of a crystallized nature. This the natives did not consider as lime. Higher up the hill the detached masses were of the whitish sandstone usual in the country.

On the south face of the hill, and in the narrow pass between it and an adjacent ridge, is a quarry of stone marl, called here Khari. It is very white, and less unctuous than that of Bhalmundra; but it is used for the same purposes. It contains many masses of limestone, not yet changed into marl. Immediately below the marl, in the passage between the two hills, the naked rock appears, and consists of thin

plates of compact limestone, in general horizontal, in some however vertical; but this latter appearance I consider as a deception, as will be afterwards explained. Above the Khari the hill was covered, as on the north side, with fragments of the usual sandstone; but among these I found some which had an exceedingly anomalous appearance, resembling a breccia with a sandy cement, and nodules of various sorts, some of them much resembling the limestone, but on these the nitric acid produces no effect. This stone, as I have before mentioned, has a most anomalous appearance, and looks as if it had undergone the action of fire. The last place where I shall notice the compact limestone, is at the caves of Gupti Benares, the situation of which, in a recess near the centre of the table land, has been amply described in the topography. On the right bank of the Guptiswar, a little before that torrent turns west, at the bottom of a perpendicular precipice of the usual sandstone, is a large rock overhanging the stream, but in other parts sloping gradually to the foot of the precipice. It consists of compact limestone, in plates entirely resembling that of Totala-kund, and from one line to two inches thick. In general the plates are horizontal; but in some places they are curiously waved, so that in sections of them in certain places, they would appear vertical, which will explain the appearance of such in the last described place. Some of the thinner plates have a white crystallized structure, and some contain very distinct veins of white crystals; but the general mass has entirely the external appearance of petrosilex, and is both hard and tough.

The entrance into the cave is a little way up the hill, and is as high and wide as the usual dimensions of the different chambers of the cave, which are usually about 18 feet wide, and 12 feet high. The sides and bottom are very uneven, having very steep ascents and descents, while one side of the floor is often lower than the other, and shelving rocks project very irregularly from either side. The first apartment extends pretty straight east from the mouth for about 380 feet, having two great descents, one near each end. The farther extremity is called Patal Ganga, or the river of the pit, but there is no stream. At the end, indeed, is a small hole, which may possibly lead to a subterranean river, but I have not heard, that any one has ventured to

penetrate through this opening. About the middle of its length this first gallery sends a branch to the south-east, which after running 87 feet rejoins the main gallery; but, before it does so, it sends to the east a very narrowed low passage, through which the visitant must creep on his hands and knees. It is about 11 feet long, and leads into the west end of another gallery similar to the first, and extending about 370 feet to the west. About 140 feet from its west end it is crossed at right angles by a similar gallery. The south arm of this is the most considerable, is about 240 feet long, and contains the chief object of worship. The north arm is only 92 feet long, and is narrower and lower than most other parts of the cave, but terminates in an apartment called Tulari Chaura, which is 92 feet long, and in the middle is both wide and lofty. At the ends of these galleries also are narrow passages, which probably communicate with other galleries and apartments; but these have not been explored. The air in this cave is by no means hot. The thermometer on the 15th of January at Patalganga stood at 76°, while in the open air it stood at 78°. Neither was the air in any degree offensive, notwithstanding that, for the first 200 feet from the mouth, the cave nestles bats innumerable, and that I had with me between 40 and 50 people with four or five torches. There seem to be strong currents of air in the cave, which prevent the stench of the bats from being oppressive; nor do the crowds of pilgrims with very numerous torches find any inconvenience from want of fresh air. Excessive darkness seems to be the reason why the bats do not go farther into the cave. Even at Patalganga two torches produced so little effect, that I could not see from one side of the cave to the other, and the persons with me had the most strange appearance from the partial illumination which the torches occasioned. A good deal of this obscurity is no doubt owing to its requiring a considerable time to suit the eye to see in such darkness, after it has been long exposed to the glare of an Indian day, which in these recesses is strongly augmented by the rocks. After a longer stay, even in the farthest recesses, the darkness produced less remarkable effects; but still is more striking than I could have imagined; and no doubt far exceeds that in a room of equal dimensions, however closely shut for the occa-

sion. I had been led to expect many images in this cave; but, what are called such, are stalactites. Water drops from many parts of the roof; and wherever there is a drip, a stalactite forms on the place where it falls, and often also on the rock from whence it comes. The former kind at first assumes the appearance of a mushroom, which botanists call *Lycoperdon*. The mass, as it increases, rises more in height than it expands in width; and, its head being rounded, it has a strong resemblance to the phallus of a Siva Lingga. The individual stalactite, however, worshipped as the great god (Mahadeva), besides one great member about 4½ feet high, contains several smaller, which surround the largest, and at the base are united with it into one mass, each being formed by a separate drip. The greatest mass of stalactite is in the crooked gallery, from whence the narrow passage leads into the interior. There are there several stalactites, such as that called Mahadeva, and which are called the five sons of Pandu; while from the roof above them are suspended many stalactitic flaps, like the ears of elephants, but much larger. I had for some time great difficulty in procuring a specimen; as I found, that breaking anything in the cave would be considered as a gross impiety, and give offence; but I at length met with an incipient stalactite, like a large mushroom, adhering to a small detached stone, and immediately put it into my pocket, without saying a word.

The natives have given no name to these stalactites, considering them as images of the gods; but a piece of the same substance, of a very fine crystalline quality was brought to me by a man, who said, that he had broken it from a rock on the table land, near Buduya, a little north-west from Rautas. He called it Silajit, which seems to imply merely an exudation from stone; for this has no sort of resemblance to the Silajit of Behar. When I procured this calcareous Silajit, I was far from the place from whence it was alleged to have come; nor when in its vicinity did I hear of any lime being found on the table land; and I suspect, that the man had broken it from some rock on the way up to Buduya by the great recess of Kariyari, which abounds in limestone. On the right side of the Karmanasa, in the narrow glen through which it runs for some way, after having fallen down the siliceous precipice called Chhanpathar, are several small cal-

careous rocks. The greater part consist of the substance Asurhar, which has been already abundantly described. One of these rocks consists of whitish crystallized grains, irregular in form, and irregularly compacted together. This must be considered as an aggregate rock, and has already been sufficiently described. It seems to be of a similar nature with the marble called Leruya, which has been mentioned in the account of Bhagalpur. The nodules of calcareous Tufa so common in Bhagalpur and Behar, are common also in the level part of this district; and are sometimes burned into lime. Here they are found in two situations; one quite superficial in the channels of rivers, where it is usually called Akara; the other imbedded in a yellowish clay, at some distance below the surface, and there it is called Gangti or Grangat. On the bank of the Ganges in this district this substance is much less common than in some others, because most of the banks here are continually undergoing changes, one side giving way, while the new land is forming opposite, and in such situations I have never observed the calcareous nodules. It is always found, so far as I hitherto know, where the banks consist of a yellow or red clay, in which there is not the smallest appearance of stratification, which seem to me never to have been swept away by the river, and probably to have once been rocks of the kinds usually called primitive, but now decayed into this clay. As such clays are found chiefly on the south or right bank of the Ganges, near the promontories of the Vindhiyan mountains, it is on this side chiefly that the calcareous matter is found; nor do I recollect between Rajamahal and Allahabad having seen it on the northern or left bank in above four or five places. In some places it is found in the bottom of the river forming stony flats, very dangerous, but not numerous. Most of such, as I observed, were of course above water, and I suspect, that all are dry, when the river is lowest. It generally forms large crusts two or three inches thick, full of holes, cavities, protuberances, and inequalities of all kinds, and adhering to the surface of the clay near the low water mark; but intermixed with these crusts are many detached nodules of very various forms, and often cylindrical, and branched like corals. These, I suspect, are formed in the clay, and fall down from thence on the beach, as the enveloping sub-

stance is worn by torrents; for, as I have before said, such are found in the clay at a distance from any river. The crusts seem to be a formation by the water, when it is near the lowest; but the clay seems to be as necessary as the water to the formation, probably as affording the calcareous matter, the particles of which gradually unite, as the river slowly washes the clay. When the river is swollen and rapid, it sweeps away the whole, in which manner I explain the appearance of the crusts near low water mark alone. Air is perhaps necessary to the operation, at least I have seen no crusts formed, where the clay appeared to be constantly covered. There can be no doubt, I think, that the formation is still going forward. On the banks of the Yamuna, where there is often gravel, the calcareous matter has in some places involved, this, forming a breccia, the nodules in which are mostly siliceous.

Although both the siliceous and calcareous rocks of this district make a strong resistance to the hammer, and break under it with more difficulty than one would expect from their hardness, which is a kind of presumption of their containing magnesia; yet the rocks considered as appertaining to the genus magnesia are very few in number. On the detached hill, however, named Masai, there is a very fine quarry of indurated potstone, a little south from that of sandstone already mentioned. It is a considerable height up the hill, is disposed in fine horizontal strata, and may be wrought to a great extent without any expense in clearing, while the stones may be allowed to slide down the sloping part of the hill, the quarry being at the bottom of the precipice; nor to look at it from a distance would one think, that it is different from the other parts of the hill, which consist of sandstone. Ahallyha Bai is said to have taken the stones from this quarry, with which she intended to build a bridge on the part of the Karmanasa, situated in the Merzapur district; but at present the only demand is for making Linggas.

The indurated potstone of Masai evidently runs under the strata of sandstone, and much of the same substance may be had in every part of the hills, for at a very remote place, in the head of the great recess of Kariyari near Rautas, above a mine of alum, slate and pyrites, there is a stratum of

the same kind as at Masai, but rather harder, being as it were, more impregnated with siliceous hornstone.

This naturally leads me to describe the mines of alum, slate and martial pyrites, which the natives confound under the general name of Kasis, as from both they procure a very impure salt of this name, which seems to be a sulphat of iron mixed with much earthy matter, and somewhat deliquescent. The best mine is situated at the bottom of one of the receses in the great glen called Kariyari, which on account of this mine is called Kasisiya Kho. The mine is at the bottom of a perpendicular rock, over which in the rainy season a small torrent falls from a tremendous height, and which displays admirably the structure of the mountain. The strata are nearly horizontal with a slight dip to the east; but vertical fissures may be also traced, and one of these has separated from the surface of an adjacent precipice a mass of rock as singular as that at the Kathotiya ghat of Rautas. It may be 50 feet high, 100 long, 10 feet wide at the base, and 8 feet at the top, and when viewed from one end, has the appearance of a natural column, standing quite erect at a little distance from the precipice, from which it has separated. The highest strata above the mine consist of the usual sandstone. Below that is the indurated potstone just now mentioned. Below that again is the ore, which runs round all the head of the recess, and from the potstone to the bottom of the precipice may be 10 feet thick; but it may sink deeper, no pains having been taken to ascertain its extent. So rude indeed are the workmen, who supply the manufacturers with mineral, that they use no iron implement, but break off pieces with a loose stone, which is a very laborious undertaking, as the ore is so hard, that it emits sparks of fire, when struck by a pick-axe. The workmen have however made a considerable excavation, and will continue enlarging it, until the roof falls, when the mine will be deserted as impracticable. The ore is of two kinds, that may at once be distinguished by the colour of the efflorescence, by which they are covered. The ore which composes by far the greatest part of the mine, has a very strong resemblance to the ore of alum, that is common in the south-west of Stirlingshire, is of a schistose nature, but where exposed to the air is covered by a yellow efflorescence, consisting in part of sulphur. Sulphur is indeed a necessary

ingredient in ores of alum; but in that of Stirlingshire I have not observed, that it effloresces on exposure to the air. The efflorescence on the ore of this district is not however entirely, nor even mostly sulphur; but thrown on the coals swells up from the water of crystallization, that it contains; and except impurities, mixed with it in taking from the rock, it is almost entirely soluble in cold water, so that the sulphur is merely a superficial efflorescence from the salt. This ore is little heavier than the potstone, under which it lies.

The other ore, which forms a band about two feet thick, is covered above by two or three feet of the slaty kind, while it rests on a stratum of it, of unknown thickness, and is a very heavy martial pyrites, or sulphuret of iron, in small irregular masses thickly imbedded in a black fine grained substance, probably of a similar nature with the schistose ore. The surface of this pyritical ore is covered by a beautiful white, or blueish saline crust, differing only from the former, in not being stained yellow by sulphur. It loses its colour by keeping in a corked bottle, and even there attracts moisture, so as to become viscid. I have little doubt, that this is the *στυπτηρια* and alumen of the Greeks and Romans, to whom our alum would appear to have been unknown.

About four or five miles north from the mouth of the great recess called Koriyari, in the bottom of which the above mine is situated, there is another, which is in a recess called Amjhor. This is semicircular, and placed in a projecting part of the hills, and it has a good deal of the funnel appearance supposed to indicate the crater of a volcano. At the entrance is a small detached peak, on the lower part of which, at least, there is a compact limestone, like that of Murli, and perhaps the whole, as in Murli, may consist of that substance. As usual here the recess is surrounded by a perpendicular rock, extending about a third of the way to the bottom, while the two remaining thirds slope rapidly, and are covered with loose stones, earth and trees. Towards the bottom of the recess the perpendicular rock extends lower than usual; and the horizontal fissures are not there so distinct as in most parts of this district, although they may be easily traced; but vertical ones are more evident. A large torrent descends there down the rock, and forms a pool at its bottom; but I did not ascend so far, turning to my right, that is towards

the north, where a smaller recess named Telkap opens into the larger, and is that, in which the mine is situated. The only road to pass into the smaller recess is along the channel of a torrent, that falls down a precipice at its bottom. I ascended this channel, which is very steep, and filled with great fragments of rock, until I came to a perpendicular rock about 20 feet high, but the great precipice at least 200 feet perpendicular, was perhaps 200 yards distant, nor on account of the smaller one could I reach it. The mine of Kasis is however at the bottom of the smaller precipice, which is not the solid rock, but consists of large fragments heaped one on the other. There can however be no doubt, that the hill here is exactly of the same structure as at Kasisiya Kho, for these fragments consist of three kinds of stone. Two of these were the ordinary sandstone, one red, and the other brownish, the third was a black indurated potstone, exactly like that above the ore at Kasisiya.

The whole stratified matter under the precipice of loose blocks consists of ore of Kasis, but its extent is nowhere defined except at the surface; for neither bottom nor ends have been laid bare. The space that has been exposed is about 20 feet long and 6 feet high; but it is very probable that it may reach all the way to the mine at Kasisiya-kho, and that it may extend west under the hills to a great distance. The greater part of the ore, as at Kasisiya, consists of a black schistose lightish substance, disposed in horizontal plates. In the centre this substance is not covered by any efflorescence, and is lighter than the ore at Kasisiya. At one end it is heavier, and was covered with a saline crust. At the other end it has suffered much decay, is quite rotten, and its masses are covered by a white powder, and are much lighter than the other parts. Although all these are used as ores that of the heaviest end is reckoned the best.

Under the central part of the schistose ore there is here also visible the pyritical ore, similar to that of Kasisiya, and covered by a saline efflorescence. The natives call the efflorescence, whether yellow, white or blue, the flower of Kasis, and it is probable that until of late years these alone were used; for the first working of the mines the natives universally attribute to an European, whom they call Phogal who settled here to make indigo, and showed them the process for

extracting Kasis. He died after a residence of four or five years, and his house is now a ruin. Since the natives have obtained the art of procuring the Kasis by boiling the ore, the efflorescence has been much neglected. Mr. Phogal wrought both mines; but since his death that at Amjhor has been deserted. In the account of manufactures I shall mention the process now used at Kariyari.

In many parts of this district also a carbonate of soda effloresces on the surface, and is collected by the washermen, but is not prepared in any manner, nor brought to market. I have nothing new to add on the subject, the appearances here being the same as in Behar. I have only to observe, that in a field about half a mile north from the Thanah of Ramjar, which is covered with the soda, I dug a well. The soil on the surface was a poor clay, containing much yellow ochre, and produced very little herbage. As the well was sunk the earth became more and more sandy, and the quantity of ochraceous matter diminished; so that from yellow it changed to a pale ash or whitish colour. Although at the bottom it was very sandy, it contained a quantity of clay sufficient to render the dry clods pretty hard. The water was found at 14 feet from the surface, and was sweet enough to the taste, nor did it effervesce with acids; but on evaporating a kettle full to a small quantity, which was rather muddy, this effervesced strongly with the nitric acid. Whether or not this effervescence was occasioned by soda or lime, I had no means of ascertaining. It must be observed that the water, which I have mentioned in the account of Bhagalpur as being sweet, although immediately under the soda, may have been of the same nature with this, as I made no trial of it by evaporation.

In many villages there are wells, which contain a mawkish water called Khara, quite unfit for drinking, but highly prised for the irrigation of gardens. These are entirely of the same nature with those in Behar, and seem to owe their qualities chiefly to a combination of soda, although this by no means effloresces on the surface where these wells are in general found; and the water of the wells dug where this effloresces is sweet, such as I have above described, although it no doubt contains a little saline matter. In the Ramgar division are many wells containing a saline water, from whence is procured

a culinary salt, called Surya-pakwa Nimak. The wells are found in the manors (*mauzas*) Sadullahpur, Sijaura, Sarai, Uriyadi, Saraiya, Tarila, and Diha, all of which except the last are on the west side of the Kudara. Diha is between that river and the Durgawati. Tarila is the furthest north, and Sarai the furthest south, and the two places may be four miles distant. Sadullahpur, where the greatest number of these wells are found, is less than three miles east from Ramgar. There is nothing particular in the appearance of the soil round these places; and close to the places where the salt is prepared it is covered with rich crops of grain. The wells have been discovered by accident in digging for water for domestic purposes, for which this saline water is quite unfit, as it has a saline taste, not very strong indeed, but exceedingly disagreeable. The wells at Sadullahpur are about 16 cubits deep. The surface is a clay called Karel, which is reckoned the best soil in this district. Under that is found a pale rust coloured clay called Ujarki, in which there are black stains. The water is found in a clay called Lalki, which differs very little in appearance from the Ujarki, but is redder, and the workmen find that the latter does not answer for making the cisterns in which they evaporate the brine, while the Lalki and surface Karel are both fit for that purpose. In many villages nitre effloresces on the roads and mud walls, and a little is prepared. I have nothing new to offer on this subject, the efflorescence being exactly of the same nature as in Behar.

In most parts of the district good well water is abundant, and at a reasonable depth. The natives, indeed, complain much of the deepness and scantiness of the supply, but this seems merely an excuse for many who will not be at the trouble to water their land. A well, for instance, which they pretended was 16 cubits deep, I found on measurement was only 14 feet. On the low lands near the Ganges, indeed, the wells are deep, and often bad, as is especially the case near Arah, partly owing to their being saline, partly to the water being found in a black swampy substance; but in general the water is fully as near the surface and of as good a quality as in Behar. The wells are, however, often spoiled by being lined with a straw rope, in place of the rings of potters' ware that are usual in other districts. The straw rope is about 3

inches thick, and is coiled round from the bottom of the well to the surface in order to prevent the sides from giving way. It does not last long, and in decay communicates a bad taste to the water. Even in the hardest clay these wells last only two or three years. In this district, also, the water in wells often rises with a sudden rush (*bhur*); and this is here expected either when a well has been dug to the usual depth at which water is found in the vicinity without coming to any substance but clay, or when, after passing a bed of sand without procuring water, the workmen come to clay. In both cases the water is procured by driving a stake into the bottom of the well. In the divisions of Ekwari and Karangja most of the wells are of this nature; in the other parts they are less common. Indaras lined with brick or stone are in some parts pretty common, although they usually cost 150 rs., which here is a large sum, equal to the annual expense of a family of decent rank. Such a well, however, will last 100 years; and most of the petty Zemindars, principal farmers, and houses dedicated to religion, have one.

At the sources of the rivers, on the hills, there are fine springs of excellent water; but none of them very remarkable. Near Bhojpur, at the bottom of the bank of the old channel of the Ganges, is a small spring, considered there as a great curiosity. In the evening of the 26th November the thermometer, which in the open air had been at 76°, on being placed in this spring rose to 82°; but the water is collected by a small mound or bank into a shallow pool, which had been heated by the sun, so that probably the thermometer though placed where the water issued, was raised a degree or two above the actual heat of the spring. The same kiud of pebbles that are found in the lower part of the channel of the Son, as mentioned in the account of Behar, are found in it as high up as the junction of the Koyel river; but not in greater quantity than between Daudnagar and Arwal. Above the mouth of the Koyel, the channel of the Son contains scarcely any pebbles of the diaphanous kind, but some few that are quite opaque, and which are of different colours, yellow, red, green and black; but these colours in each piece are uniform, nor could I find any specimen of a good quality. I have therefore no doubt that it is the Koyel which brings the pebbles of the Son from the hills, where it rises in the

Ramgar district; and I think it probable, from the similarity of the pebbles found on the Rajmahal hills, that the hills at the source of the Koyel will be found volcanic. It must be further observed, that the same hills which send the Koyel to the north to join the Son, send also a river of the same name towards the south, and near this Koyel is the only diamond mine, of which I have heard in the vicinity of Bengal; and this is probably that alluded to by Buffon as near the town of Soonelpour, situated on the river Gouil. I suspect indeed that the diamond in India is chiefly confined to the countries watered by the rivers which fall into the Bay of Bengal from the northern parts of the peninsula, although there are in Bundel-khund some mines of small importance. There is, at any rate, none in either Bengal or Behar. Potters clay is abundant, and in general makes strong ware. In Dumraong, however, the pots are brittle. In the division of Arah there is a red clay called Kabes, which is applied as a pigment before the pots are burned, as I have described in the account of Dinajpur.

The high abrupt bank of the Ganges, in many parts of this district, as well as elsewhere, consists of a schistose clay, which has very much the appearance of sandstone, but crumbles to pieces with very little force. Although called a clay by mineralogists, like many other substances included under that name, it possesses very little of the quality by which clay is most properly distinguished, and which is the forming a ductile paste when mixed with water. The schistose clay contains too much sand to form a paste of this nature. It splits into very thin plates of a brown colour, and its masses, when dry, have a good deal the appearance of the best kind of free-stone in this district, or to that of Chandalgar (Chunark), which in fact is in some places quarried close to the bank of the river. On this account some have supposed that the freestone of this district is merely the schistose clay indurated by some unknown process of nature; and according to the common received opinion, this may be considered as confirmed by the horizontal position of the strata observed in the sandstone; for there is no doubt that the schistose clay is a deposition from the Ganges, as I have observed it in places that have most evidently been formed since the survey of the river by Major Rennell. The resemblance

between the two substances, however, seems to me but of a very general nature, for on a close inspection very material differences will be found; and I have before observed, that the sandstone of this district seems to be a petrosilex in a certain state of decay, and often excessively tough, or difficult to break under the hammer, owing probably to its containing a quantity of magnesia, while the schistose clay consists of a sandy mould, slightly conglutinated by mere desiccation. I must further remark, that according to a common received opinion, we might expect to find this schistose clay filled with impressions of animal and vegetable bodies, as it has evidently been formed by deposition from a river abounding in both, and it is usually supposed that all strata containing such impressions are alluvial, that is, have been once suspended in water, from which they have been gradually deposited intermixed with animal and vegetable matters still retaining their various forms or organization. The stratum of hornstone which I found on the bank of the Ganges in the Bhagalpur district, and which contained the impression of a common Indian fern (Polypodium dichotomum), joined to this common opinion, induced me to expect that in schistose clay I should find a variety of impressions; but in the search for such I have bestowed much vain pains, and am now convinced that the strata containing impressions do not take their origin from a gradual deposition of matter suspended in water, which, under many circumstances indeed, would destroy the organization of many of the animal and vegetable matters, before the deposition could take place. I therefore suppose that such strata owe rather their origin to violent commotions, which have overwhelmed the organized substances by the mineral matter, that afterwards became stone; and, as I have before said, the hills of Rajmahal, in which the hornstone containing the impressions was found, seem to be of volcanic origin, and volcanoes are known often to throw out mud,* or earthy matter mixed with water, in a temperature by no means so high as to destroy animal or vegetable organization.

* As in the Island of Trinidad, see Vol. II. of the History of the British Colonies.—[Ed.]

CHAPTER V.

AGRICULTURE ;— CROPS CULTIVATED — HARVESTING—AGRICULTURAL IMPLEMENTS—ASSESSMENT OF LAND ;—LEASES, ETC. IN SHAHABAD.

In this district 2,297 square miles are occupied by fields, plantations, gardens and houses. Near the Ganges very little land gives two crops in the year; and after corn, in the interior a much smaller proportion than in Behar, has pulse or other grain sown among the stubble, because less attention has been paid to preserve water for the latter part of the season; but, wherever the reservoirs are in tolerable repair, this kind of cultivation is much practised, and not only the pulses called Khesari and Chana, but wheat and linseed are raised in this manner, and by far the greater part of the cotton and Arahar land, although only once cultivated, may be considered as giving two crops, one being removed before the other has made such a progress as to load the ground with two crops at one time. The proportion of land that gives two full crops in the year, both preceded by cultivation, may amount to one-twentieth of the whole, including high and low; but consists almost entirely of the highest land in the district, immediately adjacent to the villages. Except a very trifling quantity of the pulse called Urid, of rape, and of the carminative seed called Ajoyan, nothing is sown on fields that are not cultivated, and the articles above-mentioned are only sown thus on the slimy banks of the Ganges.

Except on the low banks of the Ganges, rice is everywhere the greatest crop, although the neglect of some Zemindars, in repairing the reservoirs on their estates, has somewhat diminished the extent cultivated, and has very much reduced the produce of that grain, which among the farmers of India, wherever attainable, is always considered as the most substantial object of attention. On the whole one half of the whole district may now be cultivated with rice; but there can be no doubt, if proper pains were bestowed on irrigation, that few countries are better fitted for this valuable grain; and that an extended irrigation would render it fully as pro-

ductive as Behar; although, from some circumstance in the soil, the rice of Shahabad is never equal in quality to the finer kinds reared in Behar, nor can any be reared, that has the peculiarly agreeable smell of the Basmati. This valuable quality seems to entirely depend upon some inexplicable quality in the soil, analogous to that, which gives an excellence of flavour to the wine of certain vineyards, that no skill in the cultivator can imitate; nor is there any other kind of grain except rice, which, so far as I know, is liable to similar variations of quality.

All the transplanted rice is rather finer, than what usually grows in Bengal. Sukhdas, the finest, is very white, and its smell, although inferior to the Basmati even of Patna, is still very agreeable. The land, on which the seedlings are reared, is generally manured, and about an half of it is transplanted with rice, after the seedlings have been plucked. The remainder lies fallow. The seed is commonly made to sprout, before it is sown, and the quantity of unprepared seed *(Dhuriya)*, that is sown here in any crop of rice, is very inconsiderable. Wheat and barley are often sown together, as in Behar.*

Here, as well as in Behar, there are reckoned three harvests. Reaping and thrashing are not considered as at all disgraceful, and all of high castes, who are not rich, assist in the labour. Many people are however hired, and those who at other seasons are day labourers, and poor artificers, are allowed in various parts from one bundle in twenty, to one in thirty-two, of what they reap; but their bundle is always considerably larger than those which the owner of the crop receives; and the proportion varies so much, that no adequate notion can be formed of the share which they actually receive, by knowing the number of bundles which the master takes, for every one that the reaper is allowed. By calculating the most usual allowances in each division, I find, that the lowest allowance given to the day labourer for mere reaping is nearly 3¾ per cent. of the gross produce, while the highest allowance amounts about 8¾ per cent. What is however called the expense of harvest is different from this, and

* The other crops and their relative importance are given at full length by Dr. Buchanan, but they differ very little from his observations in Behar.—[Ed.]

is the allowance which is given to a hired ploughman, whose reward during the remainder of the year is not adequate, and as a bonus, besides the share usually given to day labourers, he is allowed an addition, and thus a part of the expense is thrown on the landlord, the whole of the allowance for harvest being taken from the heap of grain, before that is divided for rent. These additions are made in different places under different pretences, named Lorhu, Pangja, Ati and Uridaki, and amount in some parts to very near five per cent. of the whole produce, while in others they are less than one quarter per cent. When nearly so low, the servant receives an allowance for thrashing; where the additions are considerable, he thrashes for nothing. The whole expense of harvest charged to the landlord varies from very near 11 per cent. of the gross produce, to a little more than 6 per cent. The quantity of grain, said to be reaped by one man daily, differed exceedingly, in different parts varying from 3,445 s. w. or 81½ lbs. to 13,630 s. w. 349 lbs.; and it must be observed, that, where the rate of reward is high, the quantity reaped in one day is always small; and vice versa, where the reward is small, the quantity reaped is great; although the ratio of increase is not always exactly in proportion to the rate of allowance; so that this is a very bad mode of rewarding the labourer. Where the rate is low, he is overwrought; and where it is high, he indulges his propensity to rest at the expense of his belly. At the rate allowed to a servant in the two places, to which the above statements apply, the man who cuts 81½ lbs. a day, makes about 9½ lbs.; while the man who reaps 349 lbs. has 21 lbs. for his labour; but this is severe. They both reap and carry the grain to the thrashing floor; but the man who receives the high rate, and makes the low wages, must also thrash the grain, while the other receives an allowance for this trouble.

Taking, as in Behar, the average of the statements given at 11 remarkable places, I find that the result gives nearly 7,600 s. w. or 195 lbs. for the quantity of grain daily reaped by one man; for which, if a day labourer, he is allowed rather more than 6 (6.177) per cent. and, if a servant, rather less than 7½ (7.47) per cent of what he cuts.*

* Day labourers are 4½ lbs. of farinaceous food *per diem*.

The whole grain is trodden out by oxen's feet. The straw thus thrashed in the rainy and cold seasons remains pretty entire, but that of all the crops which ripen in the parching heats of spring, is reduced to small fragments called Bhusa, which is considered as the most valuable fodder, and is carefully preserved; while the others are very much neglected. It must be observed, that in most places of this district the people think, that rice cannot well be preserved but in pits, and the crops which are reaped in spring, they say can be preserved in no other manner, so that even in the inundated lands pits are used, and are formed on the higher spots, where the grain may be preserved throughout the year; but near the hills, on account of the white ants, pits cannot be used. All the grain intended for seed is usually preserved in the vessels made of clay *(Kuthis)*. The most common granaries here are composed of a kind of basket made, like the bee-hives usual in Scotland, of a straw rope coiled spirally. These granaries contain 500 *mans* (52 sers of 44 s. w.) weight of grain, or 29,360 lbs. The large ones stand in the farm-yard, and are covered with a terrace of clay, which turns the rain; when small, they are placed in an end of the hut, and are very much exposed to danger.

IMPLEMENTS OF AGRICULTURE are nearly the same as in Behar. The sugar-mill* is similar to those in Behar; but the apparatus for inspissating the juice is more imperfect than in any district hitherto surveyed. There is only one boiler, a shallow iron vessel, which is placed in the open air on three or four lumps of clay, so that the fuel may be thrust under its bottom. This vessel is filled at once with the juice, which is boiled to the proper consistence, while a little ghiu or milk is added, and it is scummed, but with very small care. When the workman judges the consistence sufficient, the boiler is lifted from the fire. When the extract has cooled, it is scraped out with an iron instrument, and made by the hand into five roundish lumps, each weighing about 3 sers (80 s. w.), or $6\frac{17}{100}$ lbs. and is the nastiest looking stuff that I have ever seen. In three months a set of works, with seven men and four oxen, is supposed to clear four large bigahs of cane ($6\frac{4}{10}$ acres), boiling from three to four times a day. At this

* There are ten varieties of sugar cane grown in the Shahabad district.—[ED.]

rate the total produce of what one set of works clears in a year will be 4725 sers, or 9702 lbs. The expense of machinery, cattle, &c. is nearly the same as in Behar, that is, may amount to 14 rs. equal to 364 sers of extract. Each labourer receives daily $1\frac{1}{4}$ ser of the extract, so that the workmen take $787\frac{1}{2}$ sers, and the total charge of boiling and squeezing the cane amounts to $1151\frac{1}{2}$ sers, nearly $\frac{1}{4}$ ($\frac{2437}{10000}$) of the gross produce.

Assessment.—By far the greater part of the proprietors of assessed estates in this district complain, that the assessment is too heavy, so as to leave them little or no profit, and in many cases to exceed the value of the lands; and as a proof quote, that many estates having been put up to sale, no bidder has offered; and, the arrears having been lost to government, the lands have been let at a reduced price; and they also allege, that the revenue is so high, as leaving nothing to the owners, these have been unable to defray the expense of keeping the reservoirs in repair; and of course, that the country is growing daily less able to pay the revenue. Exclusive of the table land this amounts 1,132,677 rs. on an extent of 3151 square miles capable of being ploughed, of which 672 are now neglected, and 47 are in fallow, while the revenue of Behar and Patna amounts to 1,412,269 rs. on an extent of 5051 square miles, of which 616 are now neglected, and 29 are fallow. The revenue on Patna and Behar is at the rate of $6\frac{06}{100}$ Calcutta bigahs for the rupee, while that of Shahabad is at the rate of $5\frac{84}{100}$ bigahs for the same. So far is in support of the usual clamour; but the free land in Behar and Patna, being about $37\frac{1}{2}$ per cent. of the whole, and those in Shahabad being probably about 11 per cent. the actual rate of assessment in the former, will be about $3\frac{78}{100}$ Calcutta bigahs for the rupee, while in the latter it will be about $4\frac{64}{100}$ bigahs.

[*Dr. Buchanan enters at considerble length into the management of particular estates, but the accounts are nearly similar to those of Behar; the following refers to the Chauban's estate, and will convey a general idea to the reader.* Ed.]

In the public records the assessed lands* are divided into

* The measured lands are 616,105 bigahs and the measured *free* lands

390 lots, now chiefly belonging to new men; and there are besides a good many, who hold lands in perpetuity as vassals of these tenants *in capite*, who are called Shikmis, and who declined to avail themselves of the offer made by Lord Cornwallis to free them from vassalage. A very few only of the farmers of land will accept of leases; but those who do require one for each individual. The rates, however, are supposed to be fixed by custom, and it is thought, that more cannot be exacted. The gardens, and high land near villages that is constantly watered from wells, together with sugar-cane and cotton watered in the same manner, are usually included under one denomination, Gongyer, which is let for a money rent, and pays at from 1 to 1¾ rs. a small bigah, which is at the rate of from 39⅓ to 69 anas for the large bigah usual in this district, or of from 21 to 36¾ anas for the Calcutta bigah. The outfield, called here Palo, is all let by a division of the crop. The expense of harvest tradesmen, Brahmans, and watchmen, are deducted from the common heap, and the remainder is in common actually divided in equal shares between the farmer and landlord; but the former pay the whole allowance of the village clerk. This officer, the Tahisildar alleged, could only be removed by the collector; but the owners of the land pretended, that they were only bound to report the change, whenever they judged it necessary to make one. A receipt is only given to the tenant at the end of the year. About three-fourths of the rents are farmed.*

69,696. The invalid establishment have also 36,133 bigahs, and 1,419 watchmen have 8,157 bigahs of land.

* On some private estates there are leases granted for five years.

CHAPTER VI.

FINE AND COMMON ARTS; MANUFACTURES AND PROFITS THEREON; COINS, WEIGHTS AND MEASURES, AND COMMERCE, ETC. IN SHAHABAD.

FINE ARTS.—The architects, although formerly numerous, have, I understand, entirely disappeared; nor is there any person now qualified to plan such buildings as were erected by the Pathans or Man Singha. Sculpture is on a footing equally deplorable, and no one is capable of cutting even such wretched imitations of the human form, as were made by the Cheros and Siviras; nor is it now attempted to make any image except Linggas, in doing which the only merit must consist in the want of skill in the artist to imitate nature. There are no painters here dignified with the title Musawir; but there are some called Chitera, who resemble the Nukkash of Patna, and paint household furniture, the pageants used at the Muhurum, boxes, cards, the walls of houses, with figures of animals, and the gods, or even paint them with plain colours, thus uniting the arts of those who daub pictures, and of the Nukkash of Bhagalpur. These are as much inferior to the Musawirs as sign painters are to the Royal Academicians; but are very inferior to the sign painters of Europe, a black bull or Saracen's head, by one of whom would shame the best artist of India.

COMMON ARTS.—The soap made is not adequate to supply the district; what is used in the Company's factory at Sahar is sent from the Behar district; but the seven soapmakers seem adequate to supply all other demand. They reside at Shahasram, where the number of Muhammedans enables them to procure tallow. One boiler makes at each time 50 sers of 80 s. w. worth 7 rs. 2½ anas. This requires four days, so that this quantity may as at Gaya be made seven times a month, but the quantity, admitted to be made here at each boiling, is one-quarter more than what was allowed at Gaya, which shows the great concealment made by the workmen of Behar. The cost is as follows:

To 20 sers of tallow, 2 rs. 14 anas; to 20 do. of linseed oil, 2 rs. 2 anas; to 40 do. of impure soda (Saji), 1 r. 4 anas; to 60 do. of quick lime, 2 anas; to fuel, 4 anas.—The profit, 6 rs. 10 anas.

Therefore on each boiling being 8½ anas, the workman has

3 rs. 11 anas, 6 pice, a month. The seven houses at this rate make 16,800 sers (34,461 lbs.), worth 4207 rs. 14 anas. I have no doubt, that the quantity made by the workmen of the Behar district is fully as great in proportion.

A considerable quantity of paper is made here. In Sahar, opposite to Arwal, 60 beaters belonging to 40 houses were acknowledged; and 30 beaters in 20 houses are admitted to be in the Baraong division at no great distance south. The account given, in respect to the quantity made, entirely coincides with that procured at Arwal, that is to say, each beater makes annually 100 reams (Gaddis) of paper; but the workman here, instead of three qualities, divide it into four, the three lower of which are of the values specified at Arwal,* while the highest is worth 5 rs. a ream. They make four bales (Ghani) in the year, each bale containing 25 reams.

First bale of the 1st quality at 5 rs. per ream, 125 rs.; 2nd. do. at 4 rs. do., 100; 3rd. do. at 3½ rs. do., 87 rs. 8 anas; 4th. do. at 2 rs. do., 62 rs. 8 anas.—Total, 375 rs.

Expense attending the above:

2,500 sers (44 s. w.) are about 2,823 lbs. of old bags, 62 rs.; soda (Saji) 1,600 sers, or 2,108 lbs., 40 rs.; lime 1,400 sers, or 1,582 lbs., 24 rs.; flour for paste 700 sers, or 791 lbs., 11 rs.; cloth for strainers, 5 rs.; earthen tubs and pots, 1 rupee; bamboo baskets, 4 rs.; mats, 2 rs.; ropes and twine for package, 2 rs. 8 anas; fuel for boiling the paste, 16 rs.; four men to beat and wash, 100 rs.; one man occasionally to stir the material, 3 rs.; preparing and applying the paste, 12 rs.; smoothing, cutting and packing, 10 rs.; working off the sheets done by the master, 25 rs.; cutting the bags, 1 rupee; mould or frames, 4 rs.; putting the sheets on the wall to dry, 6 rs.; watching the paper while drying, 4 rs; horse-tail hair for separating the sheets from the wall, 12 anas: Profit, 41 rs. 12 anas.—Total, 375 rs.

The expenses here are no doubt exaggerated, as will be evident from comparing them with the account given at Arwal, and the owner of the beater, besides the 41¾ rs. has always the 25 rs. for forming the sheets, while most of the allowances for preparing and applying the paste, for smoothing, cutting, packing and drying, are gained either by him or by the females and children of his family. According to this estimate, the 90 beaters will annually prepare 9,000 reams, worth 33,670 rs.; but more is allowed to be exported by the traders of this district, persons not at all apt to exaggerate their dealings, and the number of beaters is probably at least 100.

* See Behar, *Arts and Commerce*.

The distillery of spirituous liquors is by no means so flourishing as in Behar; yet the people are less industrious, and by no means more quiet or orderly. The Mauhuya flower is almost the only sweet distilled, nor is grain ever used. The extract of sugar-cane is only used when it is cheaper than Mauhuya, which very seldom happens. The distillers pretended to have no gain, which owing to their being taxed is natural enough. A principal distiller at Arah says, that from 300 sers of flowers he procures 180 sers of spirit once distilled. He draws off his still 15 times a day.

The perfumers (Gandhi) of this district sell the oils mentioned in the account of Patna, but two men at Shahasram have stills, with which they extract an oil from the resin of the Sakuya, or *Shorea robusta*. I neither saw the process, nor oil, which is called Choya; but learn, that the powdered resin is put by small quantities at a time into the still, and that the operation is conducted without the addition of water. The oil which is procured must therefore be of the empyreumatic kind; it is however considered as a perfume, and used by the poor Muhammedans at marriages and funerals. The Hindus of Bengal also use it on some holy days; but it would seem to be rejected by those of Behar, although they burn as incense the substance from which it is extracted.

The oilmen are poorer than these of Behar, and about $\frac{6}{16}$ have too little stock to enable them to purchase the seed, and therefore express the oil for hire. Perhaps $\frac{6}{16}$ also, besides the oxen necessary for the mill, have others with which they carry grain to market, and trade in that article as well as in oil; but very few have more than one mill, there being estimated 2,880 mills to 2,780 houses. All the mills are turned by oxen; but the number of cattle is by no means adequate to keep the mills going all day, being only estimated at 2,975, whereas two oxen at least are required for each mill, to keep it going for the greater part of the day. It was stated that a mill with one beast squeezes linseed four times a day; at each time it takes four sers of 44 s. w. or 4½ lbs. The value of all the seed is 3¼ anas; the oil procured is four sers, worth four anas, and the oil-cake 12 sers, worth one ana. A man and ox therefore make only 1¾ ana a day, which, allowing for accidents, will not give more than 3 rs. a month, and from this must be deducted the feeding of the ox,

and the repairs of the mill; the former is considerable, as the animal is fed on straw and oil-cake. We may therefore be assured that the profit is underrated; but in the whole district I procured no account more favourable.

Near the Ganges some carpenters build boats; but I could procure no account of either the number built or of the expense attending the construction. They are all clinker built, with very flat bottoms, after the form called Patela, which is sharp at both ends, while the boats of the upper part of the Ganges have a perpendicular square stern; and those of the Yamuna are throughout nearly of the same breadth, and have both head and stern in shape of a horizontal wedge, the rudder being fixed to one corner of the stern.

Manufacture of thread, strings, tape, cloth, &c.—Almost the only material used by the weavers here, is cotton; and according to the estimates which I received, 28 per cent. of what is used, grows in the country. Of all this the seed is separated by the women who spin; but the people who are called Dhuniyas, beat a great part before it is fit for spinning; and, this giving employment to many people, some Chamars have adopted the profession. The Dhuniyas purchase only what is required for stuffing quilts and mats, and sell it when cleaned and beaten. I have endeavoured, by the same means as in Behar, to form an estimate of the quantity of cotton thread spun, and the result is, that about 159,500 women are thus employed part of their time, and that the annual average produce of each woman's labour is very nearly about 8 rs., the whole value of the thread being in even numbers 1,250,000 rs. The total value of the raw material, including the cost of beating, was on the same authority stated to be in even numbers 10,14,000 rs.; so that the average annual gain of a spinner amounts only to about 1½ rs., while the women of Patna and Behar, who spin only on an average 7 rs. 2 anas, 8 pice, have a profit of 3¼ rs. Near the Son, indeed, where the finer cloth is made, the people here acknowledge an almost equal gain, but in most parts the cloth is of the coarsest quality, in which case the value of the raw material is always proportionally greatest. Besides the profit above-mentioned, we must also allow somewhat for the seed, which the woman purchases with the cotton, and afterwards sells. The whole value of this may be 14,000 rs.,

which will add rather less than two anas to the average profit of each woman. Where the rates are lowest also, many of the women beat the cotton which they spin, which saving will raise a little their gain. This estimate seems to me liable to no great error, unless the number of people be supposed to have been estimated much too high; for the very lowest allowance that can be made for the clothing of such numbers, miserably as they are covered, will be 14,18,000 rs., and 240,000 rs. worth are allowed to be exported, while the imports do not exceed 24,000 rs. The cloth manufactured here ought therefore to amount to 16,34,000 rs., which at the rate stated by the weavers would require about 1,200,000 rs. worth of thread, and less than 50,000 rs. worth cannot be allowed for the other purposes to which thread is applied.

In this district there are properly no silk weavers; but 60 families in Tilotha are called Patoyas, a term usually given to such because they work cotton cloth with Tasar silk borders. The cloth is very coarse, and is called Dhuti. A piece containing a pair of Dhutis is 14 cubits long and 13 gerahs ($\frac{6}{17}$ cubits) wide, and sells usually at 50 anas. It requires $\frac{3}{4}$ sers of cotton thread, worth 9 anas, and $\frac{1}{16}$ ser of Tasar silk, worth 6 anas, so that the weaver has 5 anas profit, and a man and woman weave and warp seven pieces a month. As in the 60 houses there are 90 looms, or able-bodied men, all married, we may estimate as follows for one year:—

5,670 sers (11,490 lbs.) of cotton thread at 12 anas, 4,252 rs. 8 anas; 472½ sers (979 lbs.) of Tasar silk at 6 rs., 2,835 rs.; reward for stock and labour, 2,362 rs. 8 anas; 7,560 pieces of cloth, value of manufacture, 9,450 rs.

Each loom, therefore, makes a profit of 26¼ rs. a year; but the man and his wife, besides warping and weaving, wind monthly 2,000 Tasar cocoons, which cost 10 rs., and procure 2 sers of Tasar silk worth 12 rs. From this we may make the following statement:—

2,160,000 cocoons at 5 rs. a thousand, 10,800 rs.; profit of winding 2,160 sers of Tasar silk, 2,160 rs.; value of silk wound in this district, 12,960 rs.; silk required for the manufacture here, 2,835; remaining for exportation, 10,125 rs.

The Patoya, therefore, and his wife, make annually by weaving 26¼ rs., and by weaving Tasar 24 rs., in all 50¼ rs., which in this district is considered as but a poor provision

for a family, less than 1 r. a month for each person, young and old, reducing the family to a very scanty allowance, and it is probable that the Patuyas make at least 60 rs. a year. They are said to live better than the common weavers.

According to the statements which I received, there are in this district 7,025 houses of weavers, who work in cotton alone, and who have 7,950 looms. It is admitted that in these houses there are more than 7,950 men able to work, but the surplus is said to be employed in agriculture. As, however, the weavers are a source of revenue to the landlords, I think it probable that more are employed in their profession than has been stated. Seven thousand nine hundred and fifty looms require 457,954 rs. worth of thread, and make 622,950 rs. worth of cloth. Each man, therefore, makes goods to the value of a little less than $78\frac{6}{10}$ rs., while in Patna and Behar the average acknowledged was rather more than 108 rs. Here, further, the total profit being 164,996, the annual average gain of each weaver will be nearly $20\frac{3}{4}$ rs., while in Behar a gain of $28\frac{1}{4}$ rs. was admitted.* In this employment each loom requires the whole labour of a man and his wife, and a boy, girl, or old person, besides cooking, cleaning the house, bringing water, and beating the rough grain used in the family, can do no more than warp and wind. We must therefore allow that the produce of a loom is able to maintain five people, as in such a family there will usually be two persons incapable from infirmity of person to do any work. But in this district no one will admit that such a family can be maintained on less than 48 rs. a year; so that we must allow that the weavers here make more than double of what they acknowledged. As I have before mentioned the quantity of cloth that is probably manufactured in this district amounts in value to 1,634,000 rs., and deducting from this 9,450 rs. worth of what is Tasar and cotton mixed, we shall have for these weavers' labour cloth to the value of 1,624,550 rs. According to this, the raw material or thread, agreeably to the statements given by the weavers, and liable to no suspicion, would be about 1,200,000 rs., leaving a profit of 424,550 rs. If, therefore, the number of looms be exact, each man would

* From these two statements it is evident that the truth of small profits cannot be far from an average of both districts.—[Ed.]

weave $204\frac{1}{2}$ rs. worth in the year, and gain rather more than 53 rs. This is probably more than they actually do; as I have said that the number of persons in weaver tribes, who are actually employed at the loom, were probably underrated, but there can be little doubt that the individual weavers here make higher wages than was allowed in Patna; for I do not think that the exaggeration can be greater than in the proportion of 53 to 48. The looms employed are therefore probably $\frac{5}{48}$ more than was stated, or in all 8,778, in place of 7,950. This higher rate of wages is to be attributed to two causes. In the first place, provisions are higher, which has excited an industry that generally does more than counterbalance this evil. In the next part, no native merchants have established factories to make advances; and the cloth, which is purchased by native traders, is very generally bought for ready money on market days. On several estates the weavers are the porters called upon by the landlords to assist travellers, but either the wages made in this manner or the time employed can interfere little with the above calculations. The weavers here are less addicted than usual to music and singing hymns, which no doubt saves some time.

Salt Manufacture.—In the division of Ramgar, the saline wells, mentioned in the account of natural productions, employ some people to evaporate the water, and thus to procure the kind of culinary salt, called Surya pakka. The wells every rainy season are destroyed by the giving way of the sides. Each man therefore commences his operations in Magha (from the middle of January to the middle of February) by digging a well, which is done in the middle of a small field that he hires, and that usually may be about the fifteenth part of an acre, for which he pays a rent at the rate of about 12 rs. an acre. On this is spread out the old earth, which has been before employed, and which is gathered in heaps during the rainy season. This earth must be clay of the kinds called Karel or Lalki, of which an account has been given among the natural productions; that called Ujarki, although very like the Lalki, will not answer. The earth thus spread out is daily sprinkled with the water drawn from the well, which is usually about 10 or 12 pots, each containing 10 sers or 21lbs. After it has been thus watered for 10 or 12 days, it is put in cisterns like those used in preparing nitre, and a brine is ex-

tracted by pouring water through it while in the cistern. This brine is then put into an evaporating pan, consisting of a quadrangular plot made of brick and plaster, and subdivided by ridges 3 or 4 inches high into squares of 3 or 4 feet diameter. These little squares are filled in the morning with brine, and in the evening the inspissated liquid is collected into an earthen pot, being swept into a common gutter, which conducts to this vessel. Next morning the whole is put into one or two of the small squares, and in the course of the day the water is entirely evaporated by the action of the sun and wind. If a strong west wind blows the evaporation is completed on the first day. The earth that has been used on any year for being sprinkled is, if possible, kept two or three years in a heap before it is again used. It was said that a well gives annually only about 280 sers (40 s. w. a ser), or 286½ lbs. of this salt, which sells at 25 sers for the rupee, so that a man has only 11 rs. 2 anas, 5 pices, for five months' attendance, for they work from the middle of January until the rainy season commences, which is usually about the middle of June; and the rent and expense of the pans will reduce their gain to 10 rs. at the utmost. They explain this low reward by stating that, except when they dig the well, a little time morning and evening is only employed, and this does not interfere much with the operations of harvest, in which they are all engaged for three months of the time. They are Bindus and Malas, who in the rainy season and early part of winter are employed as boatmen and in fishing. It is probable, however, that as usual in this district they concealed a part of their gain. Some of them, indeed, alleged that their labour produced only 160 sers. The salt is bitter; but is used by the poor as a substitute for sea salt. As such, it is an infringement on the revenue resulting from the monopoly in that article; but it is probably to no great extent.

In the division of Tilothu there is a small manufacture of an impure sulphate of iron, called Kasis, and used in medicine, and by tanners and calico printers. There are in all five furnaces now employed, and each has as managers two partners, who are bound to merchants of Tilothu by advances (Asami). These managers hire people to bring the ore and fuel, and superintend the manufacture. The ore is brought down during the three months of Spring, and the

supply of each kiln requires the labour of 40 or 50 men, whose rude manner of quarrying has been described. It is said, that the whole amount given annually to these men for each kiln does not exceed 10 rs., in which case the 40 or 50 men can only work a short time for each, and probably the same men supply all the six kilns. Even at this rate they would only gain 60 rs. in three months, and either the quantity of ore required must be greater, or they must do other work. They are Kharawars, who retain the manners of those on the table land, but cultivate some wheat and barley round a village in the great recess of Kariyari, and their harvest interferes with the season of mining. For each rupee they deliver about 100 sers (80 s. w. a ser) or 205 lbs. of ore. This ore is exposed to the open air in a heap, and daily watered, until the commencement of the rainy season, when it is mixed with old ore, which has before been repeatedly lixiviated and exposed to the air, and the whole is placed under a shed ready to be used for forming a brine, an operation that is constantly going forward. At night a quantity of this ore, fresh or old, that has been exposed to air and moisture, is put into a large earthen vessel of water, and, after being mixed by stirring, is allowed to stand until morning, when the contents are strained through a pot, in the bottom of which is a hole covered by a bit of broken tile. The ore, which remains in the strainer, is thrown into a heap, which is exposed to the air all the ensuing fair season, and occasionally watered, when it is mixed with some fresh ore as at first mentioned, and is then fit again for use. It would never appear to be exhausted; that is, the whole by long and repeated exposure to the weather, may be converted into Kasis; the new ore being only required to make up the quantity annually thus converted. A cock and spigot to draw off the brine would be a more effectual, and much less troublesome means of separating the insoluble matter; but is far beyond the workmens' progress in the arts. The strained solution is put into another earthen vessel, and allowed to stand until next morning, by which time many impurities have subsided; and from these it is separated by taking it gently up with a cup. The impurities are collected in a separate heap, which after a year's exposure to the air gives much more Kasis than the ore. The solution, thus imperfectly freed from im-

purities, is then evaporated to dryness in three earthen pots placed on one furnace, which consists of two parallel walls of clay, joined above by a covering of the same material, in which there are three circular apertures for the pots. The ends are open; one serving to supply fuel, the other to give vent to the smoke. The evaporation is conducted chiefly in the two extreme pots; and, as it advances, the thickened matter is collected in the central pot, which, when full, is removed, and another put in its place. When cool, the Kasis is formed into balls of a muddy deliquescent substance, the basis of which is sulphate of iron, but this is mixed with alumine, pyrites, and perhaps other impurities. The furnaces are in the midst of extensive forests, so that the fuel costs next to nothing; but the waste of labour in mining and boiling, and the fuel, were these expenses estimated on the European scale, would render the Kasis as dear as silver. The merchants allege, that they give 14 rs. a *man* (82 lbs.) to the manufacturers (Asami), and sell it at 17 rs. to traders, who come from Patna; but the manufacturers acknowledge no such price, and say, that they receive only 25 rs. for 4 *mans;* for in this district no man will confess that he has any gain. The merchants say, that each furnace gives 16 *mans* a year, that is four loads, and the merchant probably advances for no more than one load at a time, so that for three month's use of his capital he has 21 per cent. or 84 per cent. a year. The manufacturer receives 224 rs. a year, of which one-half will defray every possible expense; so that each man may clear about 62 rs. a year; but their style of living seems a good deal higher than what this would afford, so that it is probable, that more is manufactured; but how much I cannot say. According to the merchants, the whole quantity made amounts to 80 *mans,* worth at the export price 1360 rs.; and the actual quantity is probably one-fourth more; yet in the accounts of the exports and imports, which I was able to procure, it was reduced to 15 *mans* at 9 rs. a *man.* The soda of this district is not manufactured, so far at least as I could learn.

Exports and Imports.—The amount of the exports and imports, as taken from the report of the traders in each division, is of no better authority than the account of Behar; the traders, being exceedingly shy, evidently underrate al-

most every article. Rice is a great article both of export and import. All the eastern and northern parts import this grain; the former because the reservoirs have gone to decay, or have never been sufficiently numerous, the latter partly from the same cause, and partly because the rich inundated parts produce no rice. Barley is sent to Benares. The pulse called Arahar goes chiefly to Moorshedabad. Tobacco comes from Chhapra. Refined sugar (Chini), the coarse sugar (Shukkur), the molasses, and the treacle from the district of Merzapur. The cake extract of sugar-cane is imported from Gazipur in Merzapur, and is sent partly to Beliya in the same district, but on opposite sides of the Ganges, and partly to Patna. The iron imported comes from the Ramgar district. Zinc, copper, lead, and tin, from Patna.

The exports according to the tables considerably exceed the imports, but by no means to an amount adequate to repay the balance of revenue remitted to government, which must annually amount to about 10 lac of rupees. Both imports and exports are no doubt diminished in the tables; and perhaps nearly in the same proportion, but the balance of trade in favour of the district will be greater than stated, owing to the total amount of the imports being much smaller than that of the exports. Even this, however, would fall short of restoring the balance, which is in general of course one way or other kept up; and the two sources, from whence the deficiency is made up, seem to be, money remitted to their families by men, who are abroad on service, and what is spent by pilgrims and travellers. I think it probable, that there are at least 12,000 sepoys belonging to this district, and that on an average each man does not send home less than 2 rs. a month, which will give 268,000 rs. a year; and other persons probably send a sum not much smaller. The pilgrims this year, owing to a solar eclipse were much more numerous than usual, but in ordinary years 100,000 at least pass and repass the whole extent of the district; during which, although they beg as much as possible, they must spend at least 200,000 rs. The money spent at Dadri on the immediate frontier, and of which more than a half comes from Vagsar, balances at least, what the pilgrims of this district spend abroad.

The only trade that can be called external is that from Tilothu with the Marhatta country of Ratnapur, in which raw silk, a little cloth, salt, and Manihari goods are exported. They are paid for chiefly in money. The artificers who retail goods in the streets or in shops are as follows:

Soapmakers, 15; makers of lack ornaments, 21; makers of glass ornaments, 22; makers of fireworks, 30; preparers of tobacco, 36; distillers, 37; collectors of palm wine, 38; perfumers, 40; oilmen, 41; preparers of curds, 42; confectioners, 43, parchers of grain, 44; grinders of wheat, 45; mutton butchers, 47; beef butchers, 48; Kumangars, 51; blacksmiths, 54; Kaseras, 57; Thatheras, 58; Rangdhaluyas, 59; potters, 63; cotton cleaners, 67; weavers, 70; tape makers, 73; carpet weavers, 74; string knitters, 76; salt makers, 78.

In Ekwari are three brokers or Dalals, employed in purchasing cloth for merchants. The only proper bankers (Kothwals) reside at Arah, and are branches of two houses at Patna, Baidyonath and Udaya Karnadas, both possessed of unbounded credit: they both discount bills, and give bills for cash. The kind of bankers called Aratiyas at Gaya and Daudnagar in Behar, are here also known by this name. One of them is supposed to have a capital of four lacs of rupees, and the others to have from 20 to 30,000. It is probable that the capitals of those at Arah, at least, are much larger, as they are said to advance almost the whole revenue, especially Sangkar-lal, the chief, who is also the collectors' treasurer. Wherever there is a Tahisildar, he has an agent, who has an office for receiving the money, but he also has a shop where he lends it.

The Surrafs here are on the same footing as in Behar, but in most places none have above 100 rs. capital; and it is in Mohaniya and Tilothu alone, that any one has a decent capital. In the former, one has 1,000 rs., in the other, one has 25 times that amount. I have said that many Surrafs deal also in cloth. Those who live by lending money in Biloti are called Nukudi Mahajans, as in Behar; but in the other divisions they are most commonly known by the name Sau or Sau Mahajan. They are said to have capitals of from 500 to 30,000 rs., and deal as in Behar, but lend chiefly to farmers to be repaid in grain.

The number of weekly markets (Hats or Pethiyas) is still smaller in proportion to the population than in Behar; yet a very great part of the commerce is settled at these assem-

blies. It is there that the Ladu Beparis make most of their sales and purchases; but much less is sold by retail than is done at the markets of Bengal. Here the retail trade is chiefly carried on in shops, which are often not near market places. The number of Gunjes, or marts for exportation and importation by water, is also much smaller, Bindhuliya being almost the only one of consequence, but it is very large. A great part of the export and import trade being carried on by oxen loads, this also is transacted at the weekly markets, and some of these are called Gunjes, although at a distance from any river, and although they possess less import and export trade than some which are called Hato. The application of the two terms seems to be in a great measure arbitrary.

Coins, weights and measures.—Bank notes at Arah are nearly as negociable as at Patna, and may be considered as at par. If you want cash for a note, you will not pay a higher rate of exchange than if you want a note for cash, that is from ½ to 1 per cent. The banker will not exchange either way without profit, and the notes have not at all entered into the common currency. Gold has almost totally disappeared, for the same reasons no doubt as in Behar. Cowries are current in exchange for copper money, but not where the sum amounts to one copper coin, or Paysa. The milled copper coinage of the Company is current only at Arah. In other places the rude masses of Gerukpur are by far the most common; but there are a few Madhusahi and Sherjungy Paysas equally rude; the latter was probably coined in the time of Sher-shah. The imaginary monies here are the same as in Patna.

The weights vary in almost every town, both in the number of sicca weight contained in each ser, and in the number of sers contained in each *man*. The most common ser is 44 s. w. or should be nearly $1\frac{1295}{10000}$ lbs. avoidupois. No ser is larger than 88 sicca weight, just double of the former. The number of sers contained in the *man* varies from 40 to 52. The weights are all made of rough stones, and they were lately examined and sealed by orders of Mr. Lock then acting magistrate; but Mr. Turner, the next acting magistrate, is said to have prohibited the practice, and people have since been allowed to make new weights, which have not been examined. It is

generally admitted that the sealing prevented many frauds; but the scales are on the same defective plan that is usual in India, and leave more room for slight of hand than the weights. Nothing is sold by measure except liquids, and the measures are formed of vessels fitted to contain a certain weight of the liquor for which they are intended. As they are seldom, if ever, washed, they would not at any rate answer for selling different liquors.

In every Mauza, as in Behar, there is an established weigher, but none of these can weigh at once more than the eighth of a *man*. There was in the collector's office no standard for the land measure; but the Tahisildars of Shahasram and Chayanpur had poles, which they called three Sekunderi-guz long, and these everywhere in this district are the twentieth part of the bigah allowed in public accompts. At Shahasram the pole of the Tahisildar measured 8 feet 2$\frac{9}{10}$ inches, while the Sekunderi-guz of the Kazi, also an official standard, was 2 feet 9½ inches, so that the pole should be 8 feet 4½ inches. According to the former, the bigah should be 27,170 square feet, according to the latter it should be 28,057. I was, however, assured that little or no attention was paid to these standards, and that the owners of the land used their own arm as a standard, reckoning the pole 5½ cubits, which, if they measure fair, will be nearly 8 feet 3 inches. This I have considered as the proper bigah, and it contains a small fraction more than 27,224 square feet. On lands exempted from assessment larger bigahs have been introduced, in order, no doubt, to be of use should a measurement take place; but there can be little doubt that all these lands were granted by the Toral mal bigah, which was formerly in use in the revenue accompts; and 100 of these are only equal to 60 of the present standard. The whole of Pergunah Chayanpur is let to the farmer by a small bigah, containing 11,025 square feet.

The measurers, in using the pole, follow the method adopted in Puraniya. Their skill in geometry may be estimated by the nature of the rule called Surya Mandal, or circumference of the sun, which they apply to all figures, rectilinear or curvilinear, that approach a circular form. They measure round the field in poles, each containing one-twentieth of a bigah; the extent is divided by two; the half is divided into

two portions, in the proportion of two and three; the two portions are multiplied into each other; and the product is divided by 20, which gives the extent in bigahs.

The cloth measures are on the same footing as in Behar. The Company's guz in this district is usually reckoned 17½ Gerahs or 45 inches in length, but there can be no doubt, that it is of the same length with that in Patna, as it depends on the same factory, which shows how carelessly the natives calculate in such matters, there being a difference of one-eighth part between the two computations.

Conveyance of Goods.—This district is still less favoured with water carriage than Behar, and the number of boats in proportion is perhaps smaller, nor are any kept for the accommodation of the great in travelling. Those used for the conveyance of goods are of the same kinds as at Patna. From Bindhuliya to Benares, a distance of only about 140 miles, the merchants usually pay 12 rs. for the 100 *mans* (88 s. w. the ser) measured burthen. The weight being one-tenth more than that at Patna, the hire is only one-tenth less than what is usually paid at that city for going to Calcutta; but most of the boats belong to other places, and are only procurable, either by sending to a distance for them, or by waiting until the arrival of some one which has no cargo prepared for her return. The fishing and ferry-boats are no better than those of Patna, and a few canoes are used for both purposes.

The Son is the only torrent, of which advantage has been taken to form floats, each containing about 14,000 bamboos. It is, when the river is at the lowest, from February to May both inclusive, that these are used. In the rainy season the river rises and falls so suddenly, and often rushes with such tremendous force, that it is not navigable, especially in floats. During the rainy season, indeed, commerce is in a great measure at a stand. Owing to the badness of the roads, oxen cannot at that season bring goods to the river side; and as the Ganges is at all seasons navigable, it is not here usual to form large depots in the dry season, to be exported, when the rains commence.

Two great roads pass the whole breadth of the district, but neither is of much advantage to commerce. One of them

is the military road from Calcutta to Benares, and is kept up, as reasonable, by the public. Loaded oxen, and even carts could pass during the rainy season, except immediately after great falls, when many torrents become impracticable; but, except by a few travellers, it is very seldom used at that season, because all the cross roads are then impassable; and, unless depots were formed on its sides during the fair season, nothing could be procured to transmit in the rainy. Besides, were it much frequented in the rainy season, it would be soon impassable, as it contains no hard material, and is merely a line marked by two ditches, from which a little earth is occasionally thrown to fill up ruts, or hollows made by the rain. Even in the best weather the numbers of carriages, that pass any road near towns in England, would render it useless in a week; but carts are here very seldom used for the conveyance of goods by the merchant; nor is their advantage yet so fully understood, as in many places formerly surveyed. Such are however the only roads that can be made in the country; and where it is exempt from inundation, as is the case here, the expense either of making or repairing should be trifling, were it conducted by the owners of the land, with the economy usual in their undertakings.

The other road along the old bank of the Ganges is also a military road from Danapur to Vagsar, and is kept up by a tax of 1 per cent. additional levied on the whole land that is assessed. Some objections, in point of justice, may be raised against this measure: 1st, being chiefly intended as a military road, and of little or no use to commerce, running parallel to a navigable river, its expense should be defrayed from the general revenue of the country. 2dly. Those near it no doubt, if inclined, might take advantage of its use, and they certainly avail themselves of it to a certain degree. These may therefore with some justice be taxed; but why a man at Shahasram or Chayanpur should pay for the support of a road at Arah and Bojpur, more than for one at Calcutta or Madras, cannot be explained. 3dly. The persons who ought to be most able to bear the tax, and who enjoy equally all the benefits of the road, that is, those who possess landed estates exempted from taxes, pay nothing towards the road.

4thly. The road is very indifferently suited even for military purposes, as it is not practicable in the rainy season, and is not carried through between any two great stations.

From Danapur to the boundary of this district, I know, is not at all kept up in the same manner; and towards Benares the collector of this district goes no further with his repairs than the boundary of the Merzapur district; but, whether the magistrate of that jurisdiction keeps the remainder in repair, I do not know. As this is the only public road of communication in the district except the great military road, I have no doubt that the labour of the convicts should be applied to the purpose of its repair; and, if fairly exacted, is fully adequate to keep it in good order, the bridges excepted, and these might be kept up by the tax of one per cent. on the estates in its vicinity. At present the labour of the convicts is wasted as in Behar. If this plan should be adopted, the one per cent. levied on the owners of land in the other parts of the district might be applied to two cross roads, which would be of use to almost every landholder. One would go from Arah to Shahasram by Karangju, and the other to Chayanpur from Binduliya through Jagadispur. At present the cross roads, that is those of chief utility to the people of the district, are perhaps still worse than those of Behar.

Wheel carriages even on the two great roads are very little employed, except by travellers of some rank, and that chiefly for their own conveyance; but sometimes also for their baggage. Horses are not employed for the carriage of goods, but at the inns a few ponies for riding may be hired. Asses and mules are not employed to carry anything, but the linen, fuel, and soda, used by the washermen, to whom these animals entirely belong. Almost the only conveyance procurable for hire in the interior, or even close to the Ganges, consists of oxen, that carry back loads. These are as numerous and good as in Behar.

Porters are only used to carry the baggage of travellers, and both weavers and shoemakers are generally held bound to do this, whenever required by their landlord, who on this account exempts them from ground rent for their huts. It is only through the intervention of the landlords, that European travellers can be supplied, and they still consider

themselves bound, or at least seldom refuse to supply all officers European or native, who are travelling on public business. The ferry-boats are in general very bad, and on the same footing with those in Behar.

Hardar Singha a Kaiastha, and proprietor of a landed estate near Arah, keeps a Sadabrata, and gives one day's food to whatever stranger applies. The Raja of Bhojpur does the same at Dumraong; but it is done in the name of Siva Prasad his brother. The reason of this seems to be, partly that the brother is fond of the employment, which the superintendence gives; and partly economy. If given in the Raja's own name, many insolent mendicants would insist on being kept for four or five days; but they would be consisidered as unreasonable, were they to insist on this indulgence from a younger brother. The Dewan or steward of the Raja gives also one day's food to all who apply either at a house in Vaysar, or at one in the Karangja division, but out of modesty he does not call these houses Sadabratas (constant vows) but Thaku Varis (the Lord's houses). A religious mendicant, of the order of Ramawats, at Vipur, in the Biloti division, gives food to all strangers that apply. Farther, Abdul Nasur, the owner of a landed estate in Karangja, gives 1 ser of rice to whatever traveller chooses; Bibi Asmut of Shahasram, a Muhammedan lady, gives ¼ ser of grain to all Hindus, and feeds all Muslems; and Lala Rajrup a Kaiastha, and Kananga Lala a merchant, both of the same place, give ¼ ser of grain to all comers.

The accommodation which travellers can hire is on the same footing as in Behar, only some of the Beniyas, where there are no inns, will give quarters to strangers. On the two great roads are some inns, although often at too great distances for regular stages. At Jehanabad one of brick and stone remains, which is said to have been built by Sher Shah, and is still inhabitable, although where any part has fallen it is only rebuilt with clay.*

END OF SHAHABAD.

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* Dr. Buchanan concludes his survey of each district in this abrupt manner.—[Ed.]

APPENDIX

OF

STATISTICAL TABLES,

(CONNECTED WITH THE SURVEY.)

Estimate of the number of houses in the district of Patna city and *Z*ila Behar founded on the report of the native officers and other intelligent persons.

Division or Thanah.	Gentry.	Traders.	Artificers.	Plough-men.	Total.
Patna city .	23000	5000	13000	11000	52000
Phatuha . .	9730	940	2598	14152	27420
Noubutpur .	4108	489	809	8433	13839
Bakipur-Jaywar	7845	1162	2431	9163	20601
Sherpur .	1155	264	891	6924	9234
	45838	7855	19729	49672	123094
Gaya . .	15000	2746	9011	72000	98757
Nawada . .	18400	1442	3678	50600	74120
Sheykhpurah .	12695	1414	3665	22851	40625
Duriyapur .	6084	748	1154	16350	34336
Bar . . .	10170	719	1395	14842	27126
Behar . .	19035	3352	10563	69795	102745
Helsa . .	30480	3342	4278	83820	121920
Holasgunj .	10095	937	2428	29612	43072
Jahanabad .	13891	1089	3542	30870	49392
Daudnagar .	13008	1949	6138	30894	51989
Arwal . .	5718	503	1378	22872	30471
Vikram . .	12955	400	2191	25910	41456
	167531	18641	49421	470416	706009
Total	213369	26496	69150	520088	829103

General Statistical Table of the Districts of Patna City and Zila Behar.

Division or Thanah.	Soil and Situation. Extent in square miles.	Rivers, tanks, marshes, and water courses.	Liable to be under water. Clay.	Good free soil.	Light sandy soil.	Exempt from floods. Clay land.	Free soil.	Sandy or gravelly, light.	Level rocks, stones, and barren lands.	Hills.	Manner of Occupation. Altogether unfit for the plough or waste. Rivers, &c.	Inundated of a good soil. Clear or deserted.	Reeds, bushes, and trees.	Exempt from floods, and of a good soil. Woods, bushes, and deserted villages.	Reeds, pasture, or deserted fields.	Broken corners, burial ground, roads, markets, and barren lands.	Hills.
Patna city	20	2	3	..	..	2	13	..	..	..	2	..	..	..	..	3	..
Ghatuha	145	9	46	42	9	24	13	..	..	..	9	..	3	..	..	14	..
Noubutpur	106	1	..	..	..	56	48	1	..	..	1	..	..	..	3	6	..
Bakipur-Jaywar	88	4	6	4	1	51	22	..	..	..	4	..	..	..	..	6	..
Sherpur	44	7	14	2	..	12	9	..	..	..	7	..	..	..	..	2	..
	403	23	71	48	10	145	103	1	..	..	23	..	3	..	3	31	..
Gaya	968	20	..	..	..	143	730	40	5	24	20	..	..	90	64	120	24
Nawada	953	12	..	..	..	141	718	..	22	60	12	..	..	190	24	66	60
Sheykhpurah	598	4	9	..	..	371	185	..	5	24	12	..	2	15	60	23	24
Duriyapur	200	7	135	7	6	..	44	..	..	1	7	..	6	2	..	10	1
Bar	166	5	97	5	7	3	38	11	..	..	5	..	15	1	..	10	..
Behar	317	4	..	..	..	175	126	..	8	4	4	..	..	..	8	27	4
Helsa	357	22	61	28	..	186	60	..	..	..	22	..	..	..	..	22	..
Holasgunj	304	4	..	..	..	228	47	10	5	10	4	..	..	..	..	15	10
Jahanabad	276	2	22	11	1	160	79	1	..	..	2	1	..	..	12	20	..
Daudnagar	327	3	..	..	..	133	135	40	16	..	3	.	..	37	21	41	..
Arwal	261	8	..	..	..	140	109	2	2	..	8	..	..	43	13	18	..
Vikram	228	7	..	..	..	39	182	..	..	..	7	..	..	..	..	14	..
	4955	98	334	51	14	1719	2459	104	63	123	106	1	23	384	202	386	123
Total	5358	121	405	99	24	1864	2564	105	63	123	129	1	26	384	205	417	123

Division or Thanah.	Fit for the plough, but allowed a fallow; all high.	Actually occupied by farmers, who hold the plough. Clay. Inundated.	Clay. High.	Free. Inundated.	Free. High.	People. Number of people.	Proportion between No. of. Moslems.	Hindus.	State of education. Adhyapaks or Pandits.	Moulavis.	Miyaji or Khulifah.	Gurus.	Commerce. Market places.	Exports.	Imports.
Patna city	..	3	2	..	10	312000	5	11	22	1	159	75	18	3259558	6510546
Ghatuha	..	45	22	40	12	100700	4	12	3	..	15	60	6	326100	149825
Noubutpur	..	..	52	..	44	83200	6	10	..	..	25	45	5	12400	3935
Bakipur-Jaywar	..	6	48	4	20	83170	6	10	..	3	20	10	6	4700	102075
Sherpur	..	14	11	2	8	30200	8	8	2	..	..	10	6	9300	4440
	..	66	135	46	94	609270	6	10	27	4	219	200	41	3612058	6770821
Gaya	15	..	121	..	514	451800	6	10	9	1	100	100	32	29250	111496
Nawada	..	..	95	..	500	370800	1	15	3	..	50	100	12	150650	20500
Sheykhpurah	14	7	294	..	147	435100	4	12	1	..	25	100	10	169860	24600
Duriyapur	..	129	..	7	28	120550	2	14	1	..	5	100	24	32300	30500
Bar	..	82	2	6	46	96950	4	12	2	2	25	100	14	139300	34700
Behar	..	..	158	..	116	203900	6	10	2	..	40	300	13	261990	49625
Helsa	..	54	178	24	57	262200	4	12	4	..	20	50	17	18500	3400
Holasgunj	..	..	220	..	55	193700	4	12	..	..	10	30	17	1300	2990
Jahanabad	..	21	142	9	69	211400	6	10	2	..	50	100	27	17100	11500
Daudnagar	..	..	104	..	121	160600	6	10	2	..	100	60	19	54050	70025
Arwal	..	..	119	..	60	112200	4	12	1	..	6	25	13	34780	8300
Vikram	..	..	30	..	171	185950	3	13	2	..	20	100	14	78850	7350
	29	293	1460	46	1803	2755150	3	13	29	3	451	1165	212	987980	374985
Total	29	361	1604	92	1967	3364420	4	13	56	7	670	1365	253	4599988	7145806

Proportion of inundated land in the Districts of Patna city and Zila Behar that is covered during the whole rainy season, and that is only occasionally covered.

Division.	Constantly under water or mere barren channels.	Regularly inundated throughout the rainy season.	Liable only to occasional floods, but every year covered for some days at least.	Entirely exempt from regular inundation.
Patna city	2	3	few	15
Phatuha	9	50	49	37
Noubutpur	1	..	..	105
Bakipur-Jaywar	4	5	6	73
Sherpur	7	2	14	21
	23	60	69	251
Gaya	20	..	..	948
Nawada	12	..	..	941
Shekhpurah	4	3	6	585
Duriyapur	7	135	13	45
Bar	5	98	11	52
Behar	4	..	..	313
Helsa	22	67	22	246
Holasgunj	4	..	..	300
Jahanabad	2	..	34	240
Daudnagar	3	..	..	324
Arwal	8	..	..	253
Vikram	7	..	..	221
	98	303	86	4468
Total	121	363	155	4719

Number of pilgrims who received licenses to worship at Gaya from 1797 to 1811, May to April in each year. Number of licenses issued for cash, (1798), 17,577; (1799), 21,583; (1800), 14,371; (1801), 22,276; (1802), 18,581; (1803), 23,003; (1804), 13,975; (1805), 22,119; (1806), 19,646; (1807), 32,010; (1808), 21,994; (1809), 26,632; (1810), 26,663; (1811), 30,355. Total 310,785. The foregoing were independent of exemptions granted by Government which amounted to 20,707, making a total of 331,492 who bathed in the Ganges during 14 years as an act of religious purification.

Estimate of the Population of the Districts of Patna City and Zila Behar, and of some of the causes by which it is affected.

Division or Thanah.	Sects.			Employments.				Health.							Number of marriageable girls remaining single at 15 years of age.	Houses occupied by prostitutes.
	Moslems.	Hindus.	Total.	Gentry.	Plebeians.			Proportion of those who have adopted inoculation.	Proportion of those who are annually supposed to have fevers.	Number of persons who have the leprosy called Kor.	No. of persons who have the leprosy called Charka.	No. of persons who have the disease called Tilpay.	Number of persons who have the disease called Gheg.	No. of persons who have the disease called Koranda.		
					Traders.	Artificers.	Plough men or day labourers.	anas.	anas.							
Patna city	97500	214500	312000	138000	30000	78000	66000	11	3	250	130	160	450	1350	400	600
Phatuha	25175	75525	100700	34600	3150	12600	50350	14	5	200	80	4	100	200	1000	5
Noubutpur	31200	52000	83200	24700	2600	5200	50700	13	2	200	40	..	5	50	200	3
Bakipur-Jaywar	30770	52400	83170	30950	5520	11550	35150	8	2	110	55	3	25	400	65	25
Sherpur	15100	15100	30200	3800	950	2850	22600	12	4	100	50	2	20	200	60	..
	199745	409525	609270	232050	42220	110200	224800	$11\frac{8}{20}$	$2\frac{6}{20}$	860	355	169	600	2200	1725	633
Gaya	169425	282375	451800	70600	14100	28250	338850	$15\frac{1}{2}$	3	200	100	10	30	150	300	125
Nawada	23175	347625	370800	97500	1000	4150	268150	15	4	500	200	40	25	200	1000	14
Sheykpurah	108775	326325	435100	150850	1000	11700	271550	15	2	200	50	25	30	100	500	7
Duriyapur	15069	105481	120550	30100	1900	7550	81000	$15\frac{3}{4}$	2	200	30	4	5	8	200	10
Bar	24237	72713	96950	86350	1500	6100	53000	15	4	200	40	2	..	100	150	8
Behar	76463	127437	203900	38250	9550	15900	140200	4	2	400	200	10	5	200	1200	10
Helsa	65550	196650	262200	65550	4100	12300	180250	15	2	1000	50	5	15	250	2000	25
Holasgunj	48425	145275	193700	45400	3000	12100	153200	15	2	30	10	..	..	150	200	15
Jahanabad	79275	132125	211400	59450	3300	16500	132150	15	1	300	40	..	2	100	600	16
Daudnagar	60225	100375	160600	35150	10000	15000	100450	14	2	200	100	3	5	50	100	150
Arwal	28050	84150	112200	29500	500	1050	81150	14	2	300	50	..	..	50	40	7
Vikram	25490	110460	135950	44700	600	1300	89350	15	2	250	50	1	5	60	200	4
	724159	2030991	2755150	703400	50550	131900	1869300	14	$2\frac{8}{20}$	3780	920	100	122	1418	6490	391
Total	923904	2440516	3364420	935450	92770	242100	2094100	$13\frac{3}{4}$	$2\frac{7}{20}$	4640	1275	269	722	3618	8215	1024

Estimate of the proportion of different classes of society that are employed in agriculture in the districts of Patna city and Zila Behar.

	Divisions or Thanahs.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Ashraf who do not farm	a 7	a ½	a ¼	a 2	100	a 1¼	few	150	a ¼	2	600	a 1	few	a ½	a 1	200	100
Ashraf who have farms, but do not work	100	a 1	a 2½	a 1	a 1	a ¼	a ½	a ½	a ¾	a ½	few	a ½	a ¾	a ½	a ½	a 1	a 1
Ashraf who have farms, and work with their own hand, but do not plough	..	a 2	a 2	a 3	a 1	a 1	a 3	a 4	a 3	a 2½	a 3	a 2½	a 3	a 3½	a 2½	a 2	a 4
Ashraf who hold the plough	..	a 2	..	..	..	..	a ½	a ½	..	a 1	..	..	..	..	..	a 1	..
Traders (Bukalis) who have farms	..	few	few	few	few	few	800	750	..	..	200	few	..	..	100	..	100
Traders (Bukalis) who have no farms	a 1½	a ½	a ½	a 1	a ½	a ½	200	250	a ¼	a ¼	a ¾	a ¼	a ¼	a 1¼	a 1	500	500
Artificers (Pauniyas) who live entirely by their own profession	a 4	a 1¾	a ½	a ¼	a 1	a 1	few	a 1¼	a ¼	a ½	a ½	a ¼	a ½	a ¾	a 1	a ½	a ¼
Artificers (Pauniyas) who have farms but do not work them by their own hand	..	a ¼	a ¼	few	a ½	few	a ½	few	few	few	few	few	few	few	few	few	few
Artificers (Pauniyas) who occasionally cultivate land either for themselves or for hire	..	..	a ¼	a 1¾	few	..	a ½	a ¾	¾	a ½	a ¾	a ½	a ½	a ½	a ½	a ½	a ¾
Jotiyas who plough their own farms	a ¼	a 5½	a 4	a 3	a 9	a 5	a 5	a 3	a 6	a 5¾	a 7	a 7	a 6	a 5	a 6½	a 5½	a 5
Jotiyas who take service as ploughmen	..	a 2	a 5	a 4	a 2½	a 6	a 5	a 5	a 4	a 2½	3½	a 3	a 4½	a 4	a 2½	a 4½	a 4¾
Jotiyas who are day labourers	a 3¼	a ½	a ¾	few	a ½	a 1	a 1	a 1	a ¾	a ½	a ½	a 1	a ½	a 1	a ½	a 1	a ¼

An Estimate of the Proportion of Families in the various parts of the Districts of Patna City and Zila Behar that consist of certain numbers of persons, with the various Monthly Rates of Expenditure at which such Families live.

—	Families of 300 to 400 persons.		Families of 200 persons.	Families of 150 persons.	Families of 100 persons.			Families of 41 to 50 persons.				Families of 21 to 40 persons.						Families of 11 to 20 persons.					Families of 7 to 10 persons.				
	6000 R.	1000 R.	1000 R.	500 to 700 R.	1000 to 2000 R.	500 R.	150 to 200 R.	500 R.	200 to 400 R.	100 to 150 R.	60 to 100 R.	150 to 200 R.	100 to 140 R.	70 to 85 R.	50 to 60 R.	31 to 40 R.	20 to 30 R.	61 to 90 R.	50 to 60 R.	31 to 45 R.	21 to 30 R.	10 to 20 R.	40 R.	21 to 30 R.	16 to 20 R.	11 to 15 R.	5 to 10 R.
Patna city	..	..	..	20	30	30	..	10	50	40	..	..	20	..	..	..	..	700	500	800	..	..	..	1500	2000	4300	..
Phatuha	..	..	..	..	..	..	..	..	..	..	..	10	15	..	25	..	..	..	237	237	..	475	..	1067	1067	..	713
Noubutpur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	200	270	..	..	..	751	1251	..	..	..	..	2252
Bakipur-Jaywar	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	90	90	..	..	252	468	541	541	541	1081	..	..
Sherpur	..	..	..	..	..	..	..	1	..	..	..	9	..	..	..	..	..	15	..	10	..	..	..	46	92	..	230
Gaya	1	..	..	..	..	..	..	..	100	150	250	..	..	239	..	478	1193	1910	..	2864	..	2864	..	..	..	..	..
Nawada	..	..	..	..	..	..	..	..	..	..	..	..	75	25	..	..	..	489	..	587	..	880	..	..	1956	2934	4890
Sheykhpurah	..	..	..	..	..	..	..	..	..	..	..	..	50	..	100	50	..	..	..	247	494	1239	..	..	5737	9900	7124
Duriyapur	..	..	..	..	..	..	..	15	..	50	..	..	..	418	418	..	..	1252	..	1252	..	..	..	..	..	..	..
Bar	..	..	..	..	..	..	..	..	4	..	..	..	..	10	37	..	..	..	..	26	107	134	..	160	648	1859	..
Behar	..	1	..	..	..	..	..	30	50	420	..	..	..	..	..	..	..	336	..	..	559	..	..	..	1566	2014	2685
Helsa	..	..	..	4	..	..	8	..	..	8	..	..	..	..	..	..	..	..	457	..	1371	1830	..	1372	2745	..	3208
Holasgunj	..	..	..	..	1	..	..	..	..	3	..	..	..	..	36	..	..	837	..	1004	..	1088	..	1674	2093	..	2980
Jahanabad	..	..	..	..	..	..	..	..	..	..	..	1	..	10	15	..	30	..	..	..	252	758	..	..	..	631	9474
Daudnagar	..	..	..	..	..	..	..	..	..	..	..	10	20	..	70	..	..	..	68	137	823	..	..	599	..	1798	7207
Arwal	..	..	1	..	..	..	..	..	..	10	..	..	..	..	20	..	..	..	..	180	543	241	..	..	..	1205	3615
Vikram	..	..	..	..	..	1	..	..	..	..	..	..	3	..	4	437	437	..	..	219	..	2407	..	..	..	821	3559
	1	1	1	24	31	31	8	56	204	681	250	34	188	702	755	1255	2020	5539	1262	7815	5368	13708	541	6959	18985	25462	47882

Continuation of the foregoing table.

—	Families of 6 persons.							Families of 5 persons.						Families of 4 persons.				Families of 3 persons.				
	40 R.	16 to 30 R.	10 to 15 R.	7 to 9 R.	6 R.	5 R.	3¾ to 4½ R.	15 to 20 R.	11 to 14 R.	10 R.	7 to 8 R.	4½ to 6 R.	3 to 4 R.	8 to 12 R.	5 to 7 R.	3 to 4 R.	2 to 2½ R.	6 to 10 R.	4 to 5 R.	3½ to 3¾ R.	2¼ to 3 R.	1½ to 2 R.
Patna city	..	2000	4000	..	6500	..	..	3000	4000	..	..	6500	..	2540	3500	4000	..	460	1500	..	4000	..
Phatuha	..	1424	1779	..	2491	..	..	..	712	..	949	2136	..	178	356	889	..	47	95	..	333	..
Noubutpur	..	..	..	188	..	470	845	..	..	..	..	62	939	..	94	282	375	..	75	..	175	..
Bakipur-Jaywar	..	541	901	..	1441	..	..	..	720	..	..	1261	900	..	360	1081	..	..	180	..	540	..
Sherpur	..	208	345	..	555	..	..	805	970	..	..	805	..	..	415	553	323	92	..	..	461	..
Gaya	..	2864	4774	..	..	7638	..	5728	..	..	7161	..	10025	1050	3246	4298	..	238	954	..	2626	..
Nawada	..	..	1956	4890	..	8804	..	..	..	..	5868	7335	10271	..	3423	4401	..	..	489	..	3423	..
Sheykhpurah	..	1090	3364	..	..	..	13358	989	..	..	5944	..	8902	494	1979	..	1484	..	49	..	940	..
Duriyapur	836	4180	..	..	..	..	..	..	627	..	1045	1672	..	313	521	626	..	42	..	63	104	..
Bar	..	1599	2665	..	..	..	..	..	..	1333	2001	2001	..	..	800	1867	..	..	425	..	1442	..
Behar	..	1342	3356	6042	..	..	..	..	1790	..	2238	3134	..	..	984	1701	..	..	45	..	850	..
Helsa	..	1830	..	..	3050	..	4880	..	..	3050	..	4575	4575	915	..	2745	..	458	..	..	610	1371
Holasgunj	..	..	1571	2095	..	..	4714	..	..	..	670	1005	3765	..	209	418	1885	..	..	..	125	713
Jahanabad	..	..	..	555	1717	..	6822	..	..	..	..	1414	5154	..	505	757	2780	..	..	..	254	1270
Daudnagar	..	685	1028	..	..	..	3771	..	..	771	..	1026	2316	..	86	172	1113	..	..	..	343	..
Arwal	..	..	..	2036	2845	..	1626	..	..	..	841	480	600	..	241	723	..	..	..	60	180	..
Vikram	..	..	..	655	1148	..	819	..	..	..	..	219	1531	..	..	350	962	..	..	..	154	285
	836	17763	25739	16461	19747	16912	36835	10522	8819	5154	26717	33625	48978	5490	16719	24863	8922	1337	3812	123	16560	3639

Total—Patna city 52000; Phatuha 15235; Noubutpur 8259; Bakipur-Jaywar 11533; Sherpur 5935; Gaya 60651; Nawada 62696; Sheykhpurah 63534; Duriyapur 13434; Bar 17118; Behar 29143; Helsa 39057; Holasgunj 26836; Jahanabad 32399; Daudnagar 22043; Arwal 15447; **Vikram 14011. Grand total 489331.**

Estimate of the manner in which the people of Patna city and Zila Behar are lodged.

	Divisions or Thanahs.																	
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Families that are partly or in whole accommodated in houses built of brick . . .	7200	100	1	30	1	2550	10	2	1	22	500	25	1	3	15	..	3	10464
In mud walled houses of two stories covered with tiles .	11750	470	15	150	25	1200	50	..	..	1	2000	250	50	200	2000	25	200	18386
In mud walled houses of two stories covered with thatch	50	..	45	150	..	800	500	3931	500	700	2500	1000	818	few	1251	125	200	12570
In mud walled huts covered with tiles . . .	22000	1408	100	2800	400	1794	500	25	..	1	3000	1200	200	400	2503	40	300	36671
In mud walled huts thatched with grass . . .	11000	4700	2012	8403	1626	14349	30818	43249	11317	16194	3280	35982	6546	3849	12518	7528	1900	215271
In mud walled huts thatched with stubble . . .	..	7517	6036	..	3168	39458	19261	13761	..	..	17499	..	18821	26947	3756	7529	11408	175161
In huts with walls of hurdles and covered with thatch .	..	940	..	..	685	..	7705	1966	1616	200	..	..	..	..	..	..	..	13112
In huts like bee hives . .	..	100	50	..	80	500	3852	600	..	..	364	600	400	1000	few	200	few	7693
Total	52000	15235	8259	11533	5935	60651	62696	63534	18484	17118	29143	36057	26836	32399	22043	15447	14011	489331

Estimate of the manner in which the people of Patna City and Zila Behar are covered by day and night.

	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Women who in the cold season generally dress in silk, and in the hot season in fine muslin	2-64	..	..	few	..	some	..	..	..	few	few	..	..	100	..	..	..
Women who on high occasions dress in Maldehi cloths mixed of silk and cotton, and in common use coarse muslin, sometimes bleached or dyed, more often neither	10-64	4-64	4-64	12-64	4-64	4-64	4-64	4-64	2-64	8-64	4-64	1-64	1-64	4-64	4-64	8-64	2-64
Women who always use bleached linen, on high occasions fine, in usual coarse	8-64	16-64	20-64	8-64	12-64	16-64	12-64	12-64	14-64	16-64	12-64	15-64	2-64	16-64	20-64	12-64	12-64
Women who in full dress use bleached or dyed linen, on ordinary occasions use unbleached coarse linen	16-64	..	..	..	..	..	..	..	16-64	..	1-64	..	5-64	..	..	..	..
Women who dress in a wrapper of full breadth, partly Tasar, partly coarse unbleached cotton	12-64	12-64	8-64	4-64	8-64	20-64	24-64	16-64	16-64	16-64	23-64	8-64	12-64	12-64	4-64	8-64	2-64
Women who use only a narrow wrapper of unbleached cotton	16-64	32-64	32-64	40-64	40-64	24-64	24-64	32-64	16-64	24-64	24-64	40-64	44-64	32-64	36-64	36-64	48-64
Men who in dress use Shals or silk and woollen cloth, and in common use bleached linen	2-64	25	10	30	5	1-64	150	30	20	40	200	50	10	25	300	15	25
Men who always use bleached linen, but have no Shals, silk, nor broadcloth	30-64	200	8-64	12-64	12-64	17-64	16-64	16-64	12-64	16-64	16-64	32-64	12-64	8-64	8-64	12-64	16-64
Men who only use bleached linen in full dress	20-64	16-64	12-64	28-64	12-64	2-64	..	4-64	52-64	16-64	4-64	..	2-64	16-64	48-64	28-64	32-64
Men who use unbleached cotton cloth alone, but the cloth is of a full size	12-64	40-64	28-64	24-64	few	28-64	40-64	32-64	few	24-64	42-64	28-64	42-64	16-36	few	few	few
Men who use unbleached cotton cloth alone, but the cloth is very small, and is called Langgoti	few	8-64	16-64	few	40-64	16-64	8-64	12-64	few	8-64	2-64	4-64	8-64	24-64	8-64	24-64	16-64
Families, the heads of which sleep on bedsteads with curtains (Palang)	1-64	20	4	50	10	200	20	50	20	25	200	10	10	10	200	15	1
Families, the heads of which sleep on wooden bedsteads (Charpayi) without curtains, but with turned feet	11-64	8-64	4-64	2-64	4-64	2-64	8-64	16-64	12-64	8-64	4-64	200	4-64	200	6-64	8-64	2-64
Families, the heads of which sleep on very coarse wooden bedsteads (Khatiya)	20-64	24-64	20-64	38-64	20-64	60-64	40-64	24-64	20-64	40-64	52-64	24-64	28-64	36-54	42-64	20-64	20-64
Families which in the cold season sleep on sackcloth, blankets or Sutrunjis, and in summer on mats	16-64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Families which sleep on coarse mats made of reeds, grass, straw, Khajur, or palmira leaves	16-64	32-64	40-64	24-64	40-64	2-64	16-64	24-64	32-64	16-64	8-64	40-64	32-54	28-64	16-64	36-64	42-64
Families that anoint themselves almost daily with oil	..	..	20-64	..	..	few	..	20	..	..	..	..	..	..	..	..	..
Families that anoint themselves once or twice a week	24-64	16-64	32-64	4-64	8-64	16-64	12-64	1-64	16-64	16-64	16-64	16-64	4-64	8-54	some	48-64	48-64
Families that use oil for unction only on great occasions	40-64	48-64	12-64	60-64	56-64	48-64	48-64	48-64	48-64	48-64	48-64	48-64	48-64	40-64	40-64	16-64	16-64
Families that use essence only on great occasions	16-64	4-64	few	200	10	4-64	few	50	few	50	200	100	10	200	1-54	5	15

An estimate of the manner in which the people of the District of Patna City and Zila Behar are fed.

—	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Families that eat meat daily	4–64	4	..	100	..	4–64	5	25	few	10	1000	25	15	..	50	5	..
Families that eat meat from two to ten times a month	36–64	16–64	4–64	12–64	4–64	16–64	4–64	16–64	..	16–64	8–64	16–64	4–64	4–64	16–64	24–64	4–64
Families that sacrifice on great occasion only	12–64	40–64	58–64	36–64	24–64	36–64	52–64	44–64	56–64	40–64	52–64	44–64	60–64	56–64	32–64	32–64	56–64
Families that cannot afford meat on any occasion, or that reject its use	12–64	8–64	2–64	16–64	36–64	8–64	8–64	4–64	8–64	8–64	4–64	4–64	500	4–64	16–64	8–64	4–64
Families that have as much fish as they please	1–64	100	..	150	..	..	..	..	..	..	..	..	..	..	..	..	..
Families that have fish daily on the cheap season alone, and in the dear season procure it only sometimes	48–64	16–64	24–64	16–64	32–64	16–64	16–64	24–64	24–64	16–64	8–64	16–64	48–64	16–64	2–64	16–64	16–64
Families that have only what fish they can catch themselves	3–64	40–64	36–64	32–64	16–64	40–64	40–64	36–64	32–64	40–64	52–64	44–64	16–64	44–64	46–64	40–64	44–64
Families that reject fish	12–64	8–64	4–64	16–64	16–64	8–64	8–64	4–64	8–64	8–64	4–64	4–64	500	4–64	16–64	8–64	4–64
Families that can use ghiu (butter) whenever they please	16–64	8–64	50	16–64	4–64	24–64	1–64	8–64	1–64	40–64	24–64	100	2–64	8–64	16–64	8–64	4–64
Families that use milk daily	8–64	12–64	4–64	16–64	16–64	24–64	4–64	8–64	16–64	8–64	16–64	12–64	8–64	16–64	24–64	16–64	8–64
Families that use milk in the cheap season only	12–64	20–64	16–64	32–64	few	24–64	16–64	24–64	16–64	48–64	16–64	36–64	16–64	16–64	24–64	16–64	24–64
Families that use milk on holidays	32–64	32–64	44–64	16–64	48–64	16–64	40–64	28–64	32–64	8–64	32–64	16–64	40–64	32–64	16–64	32–64	32–64
Families that seldom procure milk	12–64	..	..	..	..	..	4–64	4–64	few	few	..	..	few	..	..	few	..

Continuation of the foregoing table.

	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Families that use sugar or sweetmeats when they please	12–64	4–64	4–64	4–64	8–64	16–64	4–64	500	4–64	8–64	16–64	200	200	few	16–64	8–64	4–64
Families that use the sugar or sweetmeats in the cheap season only	24–64	..	..	12–64	..	32–64	16–64	24–64	8–64	..	16–64	4–64	4–64	8–64	16–64	8–64	16–64
Families that procure them on holidays	28–64	60–64	60–64	48–64	56–64	16–64	44–64	40–64	52–64	56–64	32–64	60–64	60–64	56–64	32–64	48–64	44–64
Families that use daily pulse for curry	48–64	60–64	48–64	48–64	48–64	48–64	16–64	48–64	32–64	56–64	60–64	56–64	24–64	48–64	62–64	56–64	48–64
Families that use pulse for curry frequently	16–64	4–64	16–64	16–64	16–64	16–64	32–64	..	16–64	..	4–64	8–64	40–64	16–64	2–64	8–64	16–64
Families that use pulse for curry seldom	few	..	..	..	..	..	16–64	16–64	16–64	8–64	..	few	few	few	few	..	..
Families that use cultivated vegetables daily	8–64	2–64	4–64	4–64	2–64	12–64	1–64	2–64	1–64	1–64	16–64	100	100	4–64	4–64	8–64	2–64
Families that use cultivated vegetables often	20–64	16–64	20–64	20–64	20–64	20–64	15–64	16–64	16–64	7–64	32–64	16–64	24–64	32–64	32–64	16–64	36–64
Families that use cultivated vegetables seldom	36–64	46–64	40–64	40–64	42–64	32–64	48–64	46–64	47–64	56–64	16–64	48–64	40–64	28–64	28–64	40–64	26–64
Families that can afford to purchase foreign spiceries sometimes or always	48–64	32–64	48–64	56–64	16–64	44–64	17–64	26–64	32–64	34–64	48–64	16–64	20–64	36–64	52–64	24–64	32–64
Families that procure oil in abundance	1–64	8–64	8–64	8–64	4–64	8–64	1–64	2–64	16–64	8–64	16–64	4–64	100	8–64	2–64	8–64	2–64
Those that have a moderate allowance of oil	35–64	32–64	24–64	16–64	20–64	16–64	4–64	16–64	16–64	40–64	16–64	20–64	16–64	16–64	8–64	20–64	10–64
Those that procure oil scantily	28–64	24–64	32–64	40–64	32–64	24–64	56–64	46–64	32–64	16–64	32–64	28–64	32–64	40–64	54–64	36–64	32–64
Families that procure oil only occasionally	few	..	..	few	8–64	16–64	3–64	200	few	few	few	12–64	16–64	few	few	..	20–64

Estimate of the Population of the Districts of Patna City and Zila Behar, and of some of the causes by which it is affected.

Division or Thanah.	Sects. Moslems.	Sects. Hindus.	Sects. Total.	Employments. Gentry.	Employments. Plebeians. Traders.	Employments. Plebeians. Artificers.	Employments. Plebeians. Plough men or day labourers.	Health. Proportion of those who have adopted inoculation.	Health. Proportion of those who are annually supposed to have fevers.	Health. Number of persons who have the leprosy called Kor.	Health. No. of persons who have the leprosy called Charka.	Health. No. of persons who have the disease called Tilpay.	Health. Number of persons who have the disease called Gheg.	Health. No. of persons who have the disease called Koranda.	Number of marriageable girls remaining single at 15 years of age.	Houses occupied by prostitutes.
								anas.	anas.							
Patna city .	97500	214500	312000	138000	30000	78000	66000	11	3	250	130	160	450	1350	400	600
Phatuha . .	25175	75525	100700	34600	3150	12600	50350	14	5	200	80	4	100	200	1000	5
Noubutpur .	31200	52000	83200	24700	2600	5200	50700	13	2	200	40	..	5	50	200	3
Bakipur-Jaywar	30770	52400	83170	30950	5520	11550	35150	8	2	110	55	3	25	400	65	25
Sherpur . .	15100	15100	30200	3800	950	2850	22600	12	4	100	50	2	20	200	60	..
	199745	409525	609270	232050	42220	110200	224800	$11\frac{8}{20}$	$2\frac{6}{20}$	860	355	169	600	2200	1725	633
Gaya . .	169425	282375	451800	70600	14100	28250	338850	$15\frac{1}{2}$	3	200	100	10	30	150	300	125
Nawada . .	23175	347625	370800	97500	1000	4150	268150	15	4	500	200	40	25	200	1000	14
Sheykpurah .	108775	326325	435100	150850	1000	11700	271550	15	2	200	50	25	30	100	500	7
Duriyapur .	15069	105481	120550	30100	1900	7550	81000	$15\frac{3}{4}$	2	200	30	4	5	8	200	10
Bar . . .	24237	72713	96950	86350	1500	6100	53000	15	4	200	40	2	..	100	150	8
Behar . .	76463	127437	203900	38250	9550	15900	140200	4	2	400	200	10	5	200	1200	10
Helsa . .	65550	196650	262200	65550	4100	12300	180250	15	2	1000	50	5	15	250	2000	25
Holasgunj .	48425	145275	193700	45400	3000	12100	153200	15	2	30	10	..	..	150	200	15
Jahanabad .	79275	132125	211400	59450	3300	16500	132150	15	1	300	40	..	2	100	600	16
Daudnagar .	60225	100375	160600	35150	10000	15000	100450	14	2	200	100	3	5	50	100	150
Arwal . .	28050	84150	112200	29500	500	1050	81150	14	2	300	50	..	..	50	40	7
Vikram . .	25490	110460	135950	44700	600	1300	89350	15	2	250	50	1	5	60	200	4
	724159	2030991	2755150	703400	50550	131900	1869300	14	$2\frac{8}{20}$	3780	920	100	122	1418	6490	391
Total	923904	2440516	3364420	935450	92770	242100	2094100	$13\frac{3}{4}$	$2\frac{7}{20}$	4640	1275	269	722	3618	8215	1024

Estimate of the proportion of different classes of society that are employed in agriculture in the districts of Patna city and Zila Behar.

	Divisions or Thanahs.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Ashraf who do not farm	a 7	a ½	a ¼	a 2	100	a 1¼	few	150	a ¼	2	600	a 1	few	a ½	a 1	200	100
Ashraf who have farms, but do not work . . .	100	a 1	a 2½	a 1	a 1	a ¼	a ½	a ½	a ¾	a ½	few	a ½	a ¾	a ½	a ½	a 1	a 1
Ashraf who have farms, and work with their own hand, but do not plough	..	a 2	a 2	a 3	a 1	a 1	a 3	a 4	a 3	a 2½	a 3	a 2½	a 3	a 3½	a 2½	a 2	a 4
Ashraf who hold the plough	..	a 2	..	..	..	..	a ½	a ½	..	a 1	..	..	..	..	..	a 1	..
Traders (Bukalis) who have farms	..	few	few	few	few	few	800	750	..	..	200	few	..	..	100	..	100
Traders (Bukalis) who have no farms	a 1½	a ½	a ½	a 1	a ½	a ½	200	250	a ¼	a ¼	a ¾	a ¼	a ¼	a 1¼	a 1	500	500
Artificers (Pauniyas) who live entirely by their own profession	a 4	a 1¾	a ½	a ¼	a 1	a 1	few	a 1¼	a ¼	a ½	a ½	a ¼	a ½	a ¾	a 1	a ½	a ¼
Artificers (Pauniyas) who have farms but do not work them by their own hand	..	a ¼	a ¼	few	a ½	few	a ½	few	few	few	few	few	few	few	few	few	few
Artificers (Pauniyas) who occasionally cultivate land either for themselves or for hire	..	..	a ¼	a 1¾	few	..	a ½	a ¾	¾	a ½	a ¾	a ½	a ½	a ½	a ½	a ½	a ¾
Jotiyas who plough their own farms	a ¼	a 5½	a 4	a 3	a 9	a 5	a 5	a 3	a 6	a 5¾	a 7	a 7	a 6	a 5	a 6½	a 5½	a 5
Jotiyas who take service as ploughmen	..	a 2	a 5	a 4	a 2½	a 6	a 5	a 5	a 4	a 2½	3½	a 3	a 4½	a 4	a 2½	a 4½	a 4¾
Jotiyas who are day labourers	a 3¼	a ½	a ¾	few	a ½	a 1	a 1	a 1	a ¾	a ½	a ½	a 1	a ½	a 1	a ½	a 1	a ¼

An Estimate of the Proportion of Families in the various parts of the Districts of Patna City and Zila Behar that consist of certain numbers of persons, with the various Monthly Rates of Expenditure at which such Families live.

	Families of 300 to 400 persons.		Families of 200 persons.	Families of 150 persons.	Families of 100 persons.			Families of 41 to 50 persons.			
—	6000 R.	1000 R.	1000 R.	500 to 700 R.	1000 to 2000 R.	500 R.	150 to 200 R.	500 R.	200 to 400 R.	100 to 150 R.	60 to 100 R.
Patna city	..	..	..	20	30	30	..	10	50	40	..
Phatuha	..	..	..	..	..	..	..	..	..	..	..
Noubutpur	..	..	..	..	..	..	..	..	..	..	..
Bakipur-Jaywar	..	..	..	..	..	..	..	..	..	..	..
Sherpur	..	..	..	..	..	..	..	1	..	..	..
Gaya	1	..	..	..	..	..	..	..	100	150	250
Nawada	..	..	..	..	..	..	..	..	..	..	..
Sheykhpurah	..	..	..	..	..	..	..	..	..	..	..
Duriyapur	..	..	..	..	..	..	..	15	..	50	..
Bar	..	..	..	..	..	..	..	..	4	..	..
Behar	..	1	..	..	..	..	..	30	50	420	..
Helsa	..	..	..	4	..	..	8	..	..	8	..
Holaagunj	..	..	..	..	1	..	..	..	..	3	..
Jahanabad	..	..	..	..	..	..	..	..	..	..	..
Daudnagar	..	..	..	..	..	..	..	..	..	..	..
Arwal	..	..	1	..	..	..	..	..	..	10	..
Vikram	..	..	..	..	..	1	..	..	..	..	..
	1	1	1	24	31	31	8	56	204	681	250

	Families of 21 to 40 persons.						Families of 11 to 20 persons.					Families of 7 to 10 persons.				
—	150 to 200 R.	100 to 140 R.	70 to 85 R.	50 to 60 R.	31 to 40 R.	20 to 30 R.	61 to 90 R.	50 to 60 R.	31 to 45 R.	21 to 30 R.	10 to 20 R.	40 R.	21 to 30 R.	16 to 20 R.	11 to 15 R.	5 to 10 R.
Patna city	..	20	..	..	..	..	700	500	800	..	..	..	1500	2000	4300	..
Phatuha	10	15	..	25	..	..	..	237	237	..	475	..	1067	1067	..	713
Noubutpur	..	..	..	30	200	270	..	..	..	751	1251	..	..	..	..	2252
Bakipur-Jaywar	4	..	..	..	90	90	..	..	252	468	541	541	541	1081	..	..
Sherpur	9	..	..	..	..	..	15	..	10	..	..	..	46	92	..	230
Gaya	..	..	239	..	478	1193	1910	..	2864	..	2864	..	..	..	..	..
Nawada	..	75	25	..	..	..	489	..	587	..	880	..	..	1956	2934	4890
Sheykhpurah	..	50	..	100	50	..	..	..	247	494	1239	..	..	5737	9900	7124
Duriyapur	..	..	418	418	..	..	1252	..	1252	..	..	..	..	..	..	..
Bar	..	..	10	37	..	..	..	..	26	107	134	..	160	648	1859	..
Behar	..	..	..	..	..	..	336	..	..	559	..	..	..	1566	2014	2685
Helsa	..	..	..	..	..	..	..	457	..	1871	1830	..	1872	2745	..	3288
Holaagunj	..	..	..	36	..	..	837	..	1004	..	1088	..	1674	2093	..	2980
Jahanabad	1	..	10	15	..	30	..	..	..	252	758	..	..	..	631	9474
Daudnagar	10	20	..	70	..	..	..	68	137	823	..	..	599	..	1798	7207
Arwal	..	..	..	20	..	..	..	..	180	543	241	..	..	..	1205	3615
Vikram	..	8	..	4	437	437	..	..	219	..	2407	..	..	..	821	3559
	34	183	702	755	1255	2020	5539	1262	7815	5868	13708	541	6959	18985	26462	47882

Continuation of the foregoing table.

—	Families of 6 persons.							Families of 5 persons.						Families of 4 persons.				Families of 3 persons.				
	40 R.	16 to 30 R.	10 to 15 R.	7 to 9 R.	6 R.	5 R.	3¾ to 4½ R.	15 to 20 R.	11 to 14 R.	10 R.	7 to 8 R.	4½ to 6 R.	3 to 4 R.	8 to 12 R.	5 to 7 R.	3 to 4 R.	2 to 2½ R.	6 to 10 R.	4 to 5 R.	3½ to 3¾ R.	2¼ to 3 R.	1½ to 2 R.
Patna city .	..	2000	4000	..	6500	..	..	3000	4000	..	..	6500	..	2540	3500	4000	..	460	1500	..	4000	..
Phatuha .	..	1424	1779	..	2491	..	..	..	712	..	949	2136	..	178	356	889	..	47	95	..	333	..
Noubutpur .	..	..	..	188	..	470	845	..	..	..	..	62	939	..	94	282	375	..	75	..	175	..
Bakipur-Jaywar	..	541	901	..	1441	..	..	..	720	..	..	1261	900	..	360	1081	..	..	180	..	540	..
Sherpur .	..	208	345	..	555	..	..	805	970	..	..	805	..	..	415	553	323	92	..	..	461	..
Gaya .	..	2864	4774	..	..	7638	..	5728	..	..	7161	..	10025	1050	3246	4298	..	238	954	..	2626	..
Nawada .	..	..	1956	4890	..	8804	..	..	..	..	5868	7335	10271	..	3423	4401	..	..	489	..	3423	..
Sheykhpurah .	..	1090	3364	..	..	..	13358	989	..	..	5944	..	8902	494	1979	..	1484	..	49	..	940	..
Duriyapur .	836	4180	..	..	..	..	..	..	627	..	1045	1672	..	313	521	626	..	42	..	63	104	..
Bar .	..	1599	2665	..	..	..	..	..	..	1333	2001	2001	..	..	800	1867	..	..	425	..	1442	..
Behar .	..	1342	3356	6042	..	..	..	..	1790	..	2238	3134	..	..	984	1701	..	..	45	..	850	..
Helsa .	..	1830	..	..	3050	..	4880	..	..	3050	..	4575	4575	915	..	2745	..	458	..	..	610	1371
Holasgunj .	..	..	1571	2095	..	..	4714	..	..	..	670	1005	3765	..	209	418	1885	..	..	..	125	713
Jahanabad .	..	..	..	555	1717	..	6822	..	..	..	..	1414	5154	..	505	757	2780	..	..	..	254	1270
Daudnagar .	..	685	1028	..	..	..	3771	..	..	771	..	1026	2316	..	86	172	1113	..	..	..	343	..
Arwal .	..	..	..	2036	2845	..	1626	..	..	..	841	480	600	..	241	723	..	..	..	60	180	..
Vikram .	..	..	..	655	1148	..	819	..	..	..	..	219	1531	..	..	350	962	..	..	..	154	285
	836	17763	25739	16461	19747	16912	36835	10522	8819	5154	26717	33625	48978	5490	16719	24863	8922	1337	3812	123	16560	3639

Total—Patna city 52000; Phatuha 15235; Noubutpur 8259; Bakipur-Jaywar 11533; Sherpur 5935; Gaya 60651; Nawada 62696; Sheykhpurah 63534; Duriyapur 13434; Bar 17118; Behar 29143; Helsa 39057; Holasgunj 26836; Jahanabad 32399; Daudnagar 22043; Arwal 15447; Vikram 14011. Grand total 489331.

Estimate of the manner in which the people of Patna city and Zila Behar are lodged.

	Divisions or Thanahs.																	
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Families that are partly or in whole accommodated in houses built of brick . . .	7200	100	1	30	1	2550	10	2	1	22	500	25	1	3	15	..	3	10464
In mud walled houses of two stories covered with tiles .	11750	470	15	150	25	1200	50	..	..	1	2000	250	50	200	2000	25	200	18386
In mud walled houses of two stories covered with thatch	50	..	45	150	..	800	500	3931	500	700	2500	1000	818	few	1251	125	200	12570
In mud walled huts covered with tiles . . .	22000	1408	100	2800	400	1794	500	25	..	1	3000	1200	200	400	2503	40	300	36671
In mud walled huts thatched with grass . . .	11000	4700	2012	8403	1626	14349	30818	43249	11317	16194	3280	35982	6546	3849	12518	7528	1900	215271
In mud walled huts thatched with stubble . . .	..	7517	6036	..	3168	39458	19261	13761	..	..	17499	..	18821	26947	3756	7529	11408	175161
In huts with walls of hurdles and covered with thatch .	..	940	..	..	685	..	7705	1966	1616	200	..	..	..	..	..	..	..	13112
In huts like bee hives . .	..	100	50	..	30	500	3852	600	..	..	364	600	400	1000	few	200	few	7693
Total	52000	15235	8259	11533	5935	60651	62696	63534	13434	17118	29143	36057	26836	32399	22043	15447	14011	469331

Estimate of the manner in which the people of Patna City and Zila Behar are covered by day and night.

	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Women who in the cold season generally dress in silk, and in the hot season in fine muslin	2–64	..	..	few	..	some	..	..	..	few	few	..	..	100	..	..	..
Women who on high occasions dress in Maldehi cloths mixed of silk and cotton, and in common use coarse muslin, sometimes bleached or dyed, more often neither	10–64	4–64	4–64	12–64	4–64	4–64	4–64	4–64	2–64	8–64	4–64	1–64	1–64	4–64	4–64	8–64	2-64
Women who always use bleached linen, on high occasions fine, in usual coarse	8–64	16–64	20–64	8–64	12–64	16–64	12–64	12–64	14–64	16–64	12–64	15–64	2–64	16–64	20–64	12–64	12-64
Women who in full dress use bleached or dyed linen, on ordinary occasions use unbleached coarse linen	16–64	..	..	..	..	..	..	..	16–64	..	1–64	..	5–64	..	..	..	..
Women who dress in a wrapper of full breadth, partly Tasar, partly coarse unbleached cotton	12–64	12–64	8–64	4–64	8–64	20–64	24–64	16–64	16–64	16–64	23–64	8–64	12–64	12–64	4–64	8–64	2-64
Women who use only a narrow wrapper of unbleached cotton	16–64	32–64	32–64	40–64	40–64	24–64	24–64	32–64	16–64	24–64	24–64	40–64	44–64	32–64	36–64	36·64	48-64
Men who in dress use Shals or silk and woollen cloth, and in common use bleached linen	2–64	25	10	30	5	1–64	150	30	20	40	200	50	10	25	300	15	25
Men who always use bleached linen, but have no Shals, silk, nor broadcloth	30–64	200	8–64	12–64	12–64	17–64	16–64	16–64	12–64	16–64	16–64	32–64	12–64	8–64	8–64	12–64	16 64
Men who only use bleached linen in full dress	20–64	16–64	12–64	28–64	12–64	2–64	..	4–64	52–64	16–64	4–64	..	2–64	16–64	48–64	28–64	32-64
Men who use unbleached cotton cloth alone, but the cloth is of a full size	12–64	40–64	28–64	24–64	few	28–64	40–64	32–64	few	24–64	42–64	28–64	42–64	16–36	few	few	few
Men who use unbleached cotton cloth alone, but the cloth is very small, and is called Langgoti	few	8–64	16–64	few	40–64	16–64	8–64	12–64	few	8–64	2–64	4–64	8–64	24–64	8–64	24-64	16 64
Families, the heads of which sleep on bedsteads with curtains (Palang)	1–64	20	4	50	10	200	20	50	20	25	200	10	10	10	200	15	1
Families, the heads of which sleep on wooden bedsteads (Charpayi) without curtains, but with turned feet	11–64	8–64	4–64	2–64	4–64	2–64	8–64	16–64	12–64	8–64	4–64	200	4–64	200	6–64	8-64	2-64
Families, the heads of which sleep on very coarse wooden bedsteads (Khatiya)	20–64	24–64	20–64	38–64	20–64	60–64	40–64	24–64	20–64	40–64	52–64	24–64	28–54	36–54	42–64	20·64	20-64
Families which in the cold season sleep on sackcloth, blankets or Sutrunjis, and in summer on mats	16–64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Families which sleep on coarse mats made of reeds, grass, straw, Khajur, or palmira leaves	16–64	32–64	40–64	24–64	40–64	2–64	16–64	24–64	32–64	16–64	8–64	40–64	32–54	28–64	16–64	36-64	42-64
Families that anoint themselves almost daily with oil	..	..	20–64	..	..	few	..	20	..	..	..	..	..	..	..	..	..
Families that anoint themselves once or twice a week	24–64	16–64	32–64	4–64	8–64	16–64	12–64	1–64	16–64	16–64	16–64	16–64	4–64	8–64	some	48-64	48-64
Families that use oil for unction only on great occasions	40–64	48–64	12–64	60–64	56–64	48–64	48–64	48–64	48–64	48–64	48–64	48–64	48–64	40–64	40–64	16-64	16-64
Families that use essence only on great occasions	16–64	4–64	few	200	10	4–64	few	50	few	50	200	100	10	200	1–54	5	15

An estimate of the manner in which the people of the District of Patna City and Zila Behar are fed.

—	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Families that eat meat daily	4–64	4	..	100	..	4–64	5	25	few	10	1000	25	15	..	50	5	..
Families that eat meat from two to ten times a month	36–64	16–64	4–64	12–64	4–64	16–64	4–64	16–64	..	16–64	8–64	16–64	4–64	4–64	16–64	24–64	4–64
Families that sacrifice on great occasion only	12–64	40–64	58–64	36–64	24–64	36–64	52–64	44–64	56–64	40–64	52–64	44–64	60–64	56–64	32–64	32–64	56–64
Families that cannot afford meat on any occasion, or that reject its use	12–64	8–64	2–64	16–64	36–64	8–64	8–64	4–64	8–64	8–64	4–64	4–64	500	4–64	16–64	8–64	4–64
Families that have as much fish as they please	1–64	100	..	150	..	..	..	..	..	..	..	..	..	..	..	..	..
Families that have fish daily on the cheap season alone, and in the dear season procure it only sometimes	48–64	16–64	24–64	16–64	32–64	16–64	16–64	24–64	24–64	16–64	8–64	16–64	48–64	16–64	2–64	16–64	16–64
Families that have only what fish they can catch themselves	3–64	40–64	36–64	32–64	16–64	40–64	40–64	36–64	32–64	40–64	52–64	44–64	16–64	44–64	46–64	40–64	44–64
Families that reject fish	12–64	8–64	4–64	16–64	16–64	8–64	8–64	4–64	8–64	8–64	4–64	4–64	500	4–64	16–64	8–64	4–64
Families that can use ghiu (butter) whenever they please	16–64	8–64	50	16–64	4–64	24–64	1–64	8–64	1–64	40–64	24–64	100	2–64	8–64	16–64	8–64	4–64
Families that use milk daily	8–64	12–64	4–64	16–64	16–64	24–64	4–64	8–64	16–64	8–64	16–64	12–64	8–64	16–64	24–64	16–64	8–64
Families that use milk in the cheap season only	12–64	20–64	16–64	32–64	few	24–64	16–64	24–64	16–64	48–64	16–64	36–64	16–64	16–64	24–64	16–64	24–64
Families that use milk on holidays	32–64	32–64	44–64	16–64	48–64	16–64	40–64	28–64	32–64	8–64	32–64	16–64	40–64	32–64	16–64	32–64	32–64
Families that seldom procure milk	12–64	..	..	..	..	..	4–64	4–64	few	few	..	..	few	..	..	few	..

Continuation of the foregoing table.

	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Families that use sugar or sweetmeats when they please . . .	12–64	4–64	4–64	4–64	8–64	16–64	4–64	500	4–64	8–64	16–64	200	200	few	16–64	8–64	4–64
Families that use the sugar or sweetmeats in the cheap season only .	24–64	..	..	12–64	..	32–64	16–64	24–64	8–64	..	16–64	4–64	4–64	8–64	16–64	8–64	16–64
Families that procure them on holidays	28–64	60–64	60–64	48–64	56–64	16–64	44–64	40–64	52–64	56–64	32–64	60–64	60–64	56–64	32–64	48–64	44–64
Families that use daily pulse for curry	48–64	60–64	48–64	48–64	48–64	48–64	16–64	48–64	32–64	56–64	60–64	56–64	24–64	48–64	62–64	56–64	48–64
Families that use pulse for curry frequently	16–64	4–64	16–64	16–64	16–64	16–64	32–64	..	16–64	..	4–64	8–64	40–64	16–64	2–64	8–64	16–64
Families that use pulse for curry seldom	few	..	..	..	..	..	16–64	16–64	16–64	8–64	..	few	few	few	few	..	..
Families that use cultivated vegetables daily	8–64	2–64	4–64	4–64	2–64	12–64	1–64	2–64	1–64	1–64	16–64	100	100	4–64	4–64	8–64	2–64
Families that use cultivated vegetables often	20–64	16–64	20–64	20–64	20–64	20–64	15–64	16–64	16–64	7–64	32–64	16–64	24–64	32–64	32–64	16–64	36–64
Families that use cultivated vegetables seldom	36–64	46–64	40–64	40–64	42–64	32–64	48–64	46–64	47–64	56–64	16–64	48–64	40–64	28–64	28–64	40–64	26–64
Families that can afford to purchase foreign spiceries sometimes or always	48–64	32–64	48–64	56–64	16–64	44–64	17–64	26–64	32–64	34–64	48–64	16–64	20–64	36–64	52–64	24–64	32–64
Families that procure oil in abundance	1–64	8–64	8–64	8–64	4–64	8–64	1–64	2–64	16–64	8–64	16–64	4–64	100	8–64	2–64	8–64	2–64
Those that have a moderate allowance of oil	35–64	32–64	24–64	16–64	20–64	16–64	4–64	16–64	16–64	40–64	16–64	20–64	16–64	16–64	8–64	20–64	10–64
Those that procure oil scantily .	28–64	24–64	32–64	40–64	32–64	24–64	56–64	46–64	32–64	16–64	32–64	28–64	32–64	40–64	54–64	36–64	32–64
Families that procure oil only occasionally	few	..	..	few	8–64	16–64	3–64	200	few	few	few	12–64	16–64	few	few	..	20–64

Continuation of the foregoing table.

	Division or Thanah.																
—	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Families that have salt in abundance	8–64	2–64	8–64	4–64	4–64	12–64	1–64	2–64	16–64	8–64	16–64	100	100	8–64	4–64	8–64	2–64
Families that procure a stinted allowance of salt	32–64	8–64	24–64	20–64	20–64	20–64	4–64	16–64	16–64	40–64	16–64	24–64	16–64	16–64	28–64	20–64	20–64
Families that procure a scanty allowance of salt	16–64	54–64	32–64	40–64	32–64	32–64	56–64	44–64	32–64	16–64	32–64	28–64	32–64	40–64	32–64	36–64	40–64
Families that procure salt in very small quantities	8–64	..	few	few	8–64	few	3–64	2–64	few	few	..	12–64	16–64	few	few	..	2–64
Families who use rice two times daily, with wheaten cakes occasionally as a variety	32–64	8–64	24–64	28–64	8–64	48–64	37–64	8–64	4–64	16–64	60–64	16–64	16–64	whole	32–64	32–64	24–64
Families who once a day use boiled rice, and once wheaten cakes	32–64	48–64	..	20–64	32–64	16–64	24–64	56–64	..	16–64	4–64	48–64	48–64	few	32–64	32–64	..
Families who use in general wheat or other coarse grains, and procure rice on some occasion only	few	8–64	40–64	16–64	24–64	..	..	some	60–64	32–64	..	..	..	..	..	..	40–64
Families who for a part of the year use mahuya or other substitutes for grain	..	..	..	..	..	..	3–64	few	few	few	few	..	..	..	..	..	..
Families who use two or three curries daily or frequently	8–64	2–64	4–64	4–64	2–64	12–64	1–64	2–64	16–64	1–64	16–64	100	100	4–64	4–64	8–64	2–64
Families who use two or three curries five or six times a month	20–64	16–64	20–64	20–64	20–64	20–64	16–64	16–64	16–64	7–64	32–64	16–64	24–64	32–64	32–64	16–64	20–64
Families who use only one curry a day except on great occasions	36–64	46–64	40–64	40–64	42–64	32–64	47–64	46–64	32–64	56–64	16–64	48–64	40–64	28–64	28–64	40–64	42–64

An estimate of the extent to which the people of Patna city and Zila Behar indulge in various intoxicating substances.

	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Kelsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Men who are addicted to palm wine	44-64	40-64	40-64	48-64	40-64	16-64	32-64	48-64	48-64	24-64	48-64	48-64	40-64	40-64	32-64	32-64	40-64
Men who are addicted to distilled liquors	44-64	40-64	40-64	32-64	40-64	32-64	32-64	32-64	48-64	40-64	32-64	40-64	40-64	32-64	40-64	28-64	32-64
Men who use opium	4-64	200	50	2-64	50	4-64	150	2-64	10	50	1-64	16-64	100	200	8-64	100	100
Men who smoke Gangja	16-64	4-64	1-64	8-64	100	8-64	500	8-64	4-64	4-64	4-64	4-64	2-64	4-64	4-64	200	1-64
Men who use Siddhi or Bhang	16-64	8-64	4-64	16-64	4-64	8-64	6-64	1-64	1-64	4-64	4-64	4-64	2-64	4-64	16-64	200	2-64
Men who use Charas	few	few	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..
Men who smoke prepared tobacco in abundance	56-64	48-64	48-64	56-64	40-64	60-64	16-64	48-64	48-64	56-64	48-64	56-64	32-64	56-64	40-64	40-64	32-64
Do. who cannot smoke abundance of any kind of tobacco, or who reject its use	8-64	16-64	16-64	8-64	24-64	4-64	48-64	16-64	16-64	8-64	16-64	8-64	32-64	8-64	24-64	24-64	32-64
Women who smoke prepared tobacco	1000	few	few	few	..	20-64	..	..	..	..	..	..	..	..	..	..	..
Men who chew tobacco	32-64	40-64	32-64	32-64	40-64	32-64	24-64	32-64	32-64	32-64	48-64	56-64	32-64	16-64	32-64	48-64	32-64
Women who chew tobacco	40-64	32-64	16-64	16-64	40-64	8-64	24-64	8-64	few	4-64	40-64	56-64	32-64	8-64	8-64	32-64	12-64
Men who use snuff	4-64	8-64	4-64	4-64	few	8-64	some	few	8-64	2-64	2-64	4-64	1-64	8-64	4-64	8-64	4-64
Men and women who have betle in abundance	40-64	16-64	4-64	24-64	8-64	24-64	1-64	16-64	8-64	4-64	16-64	24-64	4-64	8-64	32-64	32-64	4-64
Men and women who are stinted in betle	16-64	32-64	44-61	20-64	48-64	24-64	32-64	16-64	8-64	28-64	40-64	32-64	44-64	16-64	16-64	16-64	16-64
Men and women who seldom procure betle	8-64	16-64	16-64	20-64	8-64	16-64	31-64	32-64	48-64	32-64	8-64	8-64	16-64	40-64	16-64	16-64	44-64

An estimate of the manner in which the people of Patna city and Zila Behar are supplied with fuel and light.

	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Fire wood	24-64	8-64	4-64	16-64	4-64	24-64	16-64	24-64	4-64	4-64	4-64	1-64	16-64	2-64	16-64	4-64	4-64
Bushes and reeds	24-64	—	—	—	—	few	—	40-64	24-64	60-64	60-64	—	—	62-64	—	—	—
Straw husks and stems of crops	16-64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cowdung and husks	—	56-64	60-64	48-64	60-64	40-64	48-64	—	36-64	—	—	63-64	48-64	—	48-64	60-64	60-64
Mustard seed oil	few	8-64	4-64	4-64	4-64	36-64	60-64	8-64	—	8-64	40-64	4-64	20-64	36-64	16-64	40-64	9-64
Linseed oil usually mixed with that of Poppy seed	48-64	16-64	16-64	32-64	12-64	16-64	—	48-64	—	—	20-64	24-64	28-64	8-64	32-64	20-64	40-64
Sesamum oil	—	—	—	—	—	2-64	—	—	—	—	—	—	—	—	—	—	—
Castor oil or that of the Ricinus	16-64	36-64	44-64	16-64	40-64	6-64	4-64	8-64	60-64	48-64	2-64	32-64	16-64	16-64	12-64	4-64	12-64
Oil of safflower or Carthamus	—	4-64	few	4-64	6-64	—	—	—	4-64	8-64	—	—	—	—	—	—	1-64
Poppy seed oil	—	—	—	8-64	2-64	—	—	—	—	—	2-64	4-64	—	4-64	4-64	few	2-64
Mahuya seed oil	—	—	—	—	—	2-64	—	—	—	—	—	—	—	—	—	—	—
Surgujiya oil	—	—	—	—	—	2-64	—	—	—	—	—	—	—	—	—	—	—
Families who burn a lamp all night	6-64	8-64	few	2-64	1-64	2-64	150	2-64	4-64	few	2-64	100	50	4-64	8-64	10	100
Families who burn a lamp to midnight	16-64	16-64	8-64	24-64	4-64	8-64	4-64	4-64	8-64	8-64	4-64	1-64	2-64	16-64	16-64	25	2-64
Do. who burn a lamp seven hours and a half	24-64	28-64	16-64	16-64	16-64	32-64	24-64	10-64	12-64	16-64	16-64	4-64	4-64	16-64	16-64	32-64	8-64
Do. who burn a lamp from two to four hours	16-64	12-64	40-64	22-64	43-64	22-64	33-64	47-64	40-64	40-64	42-64	—	58-64	28-64	24-64	—	54-64
Do. who burn a lamp when they take supper	2-64	—	—	—	few	—	few	—	—	—	—	59-64	—	—	—	32-64	—
Do. who burn torches or straw at supper	—	—	—	—	—	—	8-64	1-64	—	—	—	few	—	—	—	—	—

An estimate explaining the extent of luxury in attendance and conveyance in the districts of Patna city and Zila Behar.

	Division or Thanah.																	
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Tame Elephants	24	—	—	—	—	40	3	2	2	2	3	4	—	—	—	1	3	84
Camels	5	—	—	—	—	30	—	—	—	2	—	—	—	—	—	3	—	40
Saresa or other large horses	277	120	17	100	—	1160	—	5	15	50	50	25	25	25	250	100	106	2325
Ponies of the kind called Tatus	515	50	100	150	100	3500	300	200	250	300	800	400	200	1500	1000	250	150	9215
Rath or four-wheeled carriages drawn by oxen	44	—	—	2	1	12	1	—	—	5	2	3	1	—	4	—	—	75
Carriages with two wheels drawn by one horse and called Ekka	418	15	—	20	2	10	—	—	—	6	—	—	—	—	—	—	—	471
Majholi and Raharu two wheeled carriages drawn by oxen	236	10	—	20	—	50	9	—	—	40	8	5	4	—	100	10	15	507
Palanquins	632	280	51	135	29	988	218	515	70	220	254	180	60	150	300	160	170	4412
Male free domestic servants	4100	300	50	100	40	1000	400	300	25	150	500	100	200	200	400	100	100	8065
Female free domestic servants	4000	100	10	50	—	40	—	12	5	10	150	—	25	—	100	—	—	4502
Men slaves entirely domestic	1000	125	—	25	30	3000	—	—	—	50	—	300	—	25	—	—	500	5055
Men slaves partly employed in agriculture partly in domestic service	100	125	220	125	—	3000	500	250	—	200	2100	125	100	475	1800	150	—	9270
Do. do. employed entirely in agriculture	—	1750	250	500	70	—	1500	1250	1500	750	5900	675	700	500	1200	450	1500	18495
Poor women who bring water to wealthy families	2500	300	200	100	50	700	300	—	—	100	—	50	50	125	500	100	100	5175

Explanatory of the state of education in the district of Patna city and Zila Behar.

		Division or Thanah.																	
		Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Men born for the use of the pen.	Men fit to act as writers born in the division	6500	1700	500	800	140	1800	800	500	300	1500	4700	1100	1300	1600	1800	350	500	25890
	Employed at home	1500	450	50	200	43	700	400	200	130	400	700	350	320	400	700	115	220	6878
	Employed abroad	1000	150	45	100	27	250	250	150	10	300	380	120	320	300	200	65	130	3797
	Not employed	4000	1100	405	500	70	850	150	150	160	800	3620	630	660	900	900	170	150	15215
	Strangers employed here as writers	800	50	35	40	5	450	90	150	10	65	45	65	115	200	100	35	55	2[illegible]
	Strangers waiting for employment	400	—	—	10	—	300	—	—	—	—	—	—	—	—	—	—	—	710
Men born for the profession of arms.	Men belonging to the district employed in the regular army	200	125	5	25	50	50	50	100	20	50	25	25	10	125	40	150	100	1150
	Employed in the police or revenue	1300	300	20	150	100	250	250	200	20	125	500	200	100	500	400	50	80	4545
	Employed abroad in the police or revenue	1000	625	80	100	90	500	250	350	25	100	250	150	120	500	300	125	70	4635
	Not employed	3500	3809	516	500	185	2200	1960	1450	55	1070	3643	1220	1780	2025	1372	1930	875	28090
	Strangers employed in the police or revenue	500	100	30	50	50	400	125	150	17	25	60	65	35	500	70	70	25	2272
	Strangers waiting for employment	300	—	—	40	—	200	—	—	—	—	—	—	—	—	—	—	—	540

Explaining the manner in which the cultivated lands of the District of Patna city and Behar are occupied.

	Division or Thanah.																	
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Houses	18000	3500	1500	2400	600	20000	13000	6750	2600	2000	4120	8000	4000	5220	6750	4300	3100	105840
Trees	3500	3500	1800	2000	1000	24000	14000	10000	8400	4050	8200	18700	9500	7200	5700	2000	5200	128750
Bamboos	2	20	50	5	5	10	10	10	10	50	50	20	20	200	10	7	40	519
Kitchen gardens	1000	500	100	300	525	15000	4500	3300	2000	1500	1300	2000	1700	1400	1700	1000	1000	38825
Vegetables in the fields	400	1000	1000	100	90	1000	800	100	100	200	380	300	200	100	900	100	100	6870
Broadcast summer rice or Sati by itself	..	2000	2900	120	525	6500	9000	8500	380	1000	400	4700	3300	7200	700	1400	2100	50725
Do. followed by Masur	..	..	700	240	50	450	..	650	..	400	400	2300	2050	700	700	500	600	9740
Do. do. do. mixed with Linseed	..	..	700	..	50	..	1750	..	..	200	..	..	..	700	..	500	600	4500
Do. do. followed by Pease	..	..	..	240	100	200	..	650	..	..	400	1400	800	1400	1700	250	1250	8390
Do. do. pease and Sarso	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100	300	400
Do. do. Mung sown among the stubble	..	..	..	..	..	..	..	..	..	..	..	..	..	..	650	..	..	650
Do. do. But or Chana	..	..	700	125	200	450	9000	650	..	400	..	2300	2000	700	5400	6400	3100	31425
Do. do. But mixed with Linseed	..	..	..	125	50	..	..	..	..	200	..	..	..	600	..	..	..	975
Do. do. Barley	..	..	..	350	100	450	..	650	..	1600	800	4700	6200	1400	1700	5400	6200	29550
Do. do. Barley mixed with pease	..	..	..	..	..	450	900	650	..	..	400	..	..	..	..	..	..	2400
Do. do. Barley mixed with But	..	..	..	..	50	..	..	..	..	..	400	..	..	..	..	1350	1500	3300
Do. do. Wheat	..	..	..	..	250	900	..	1300	..	800	800	2300	6200	1400	5400	..	1500	20850
Do. do. Turi, Gota, and Ratai	..	..	..	..	50	..	..	..	..	200	200	..	..	..	..	..	300	750
Do. do. Sarso	..	..	..	..	..	..	..	..	..	..	..	900	100	..	..	..	..	1000
Do. do. Linseed	..	..	..	..	..	200	..	175	..	..	200	..	..	1000	..	250	300	2125
Do. do. Rarhiya Cotton and Turi	..	..	..	..	..	..	..	..	..	..	..	..	..	..	300	..	..	300
Do. do. Poppy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	..	..	50
Do. winter rice by itself	200	3500	24100	12000	16790	364000	270000	163000	5600	27000	57500	122500	16500	154000	6750	105000	68200	1371440
Do. do. Khesari sown among the stubble	600	18000	9000	8500	4200	75000	109000	20000	..	24300	..	145700	55400	3600	47000	21500	25000	626100
Do. do. Khesari mixed with Linseed do.	..	3500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	3500
Do. do. Pease do.	..	..	2900	..	..	19000	109000	6500	..	..	12300	..	..	1800	..	..	..	151500
Do. do. But do.	50	3500	4400	2400	2000	..	..	..	..	..	..	..	..	..	..	5400	6200	23950
Do. do. Linseed do.	..	..	..	..	..	..	..	900	..	..	4100	4700	4000	..	..	..	3100	16800
Transplanted do. by itself	100	10750	14750	18200	17600	264000	168000	242000	1800	17755	130000	72000	64250	119500	54000	32000	50000	1276705
Do. do. Khesari sown among the stubble	200	38300	7000	14000	2000	58000	59000	67000	..	12000	100000	35200	190000	3600	54000	21500	21000	682800
Do. do. Khesari mixed with Linseed do.	..	3400	..	..	..	..	..	..	..	..	8200	2300	10750	..	..	..	1500	26150
Do. do. Pease sown among the stubble	..	..	4300	..	..	9500	59000	13400	..	..	21000	..	..	1800	..	..	..	109000
Do. do. But or Chana	..	..	2800	2400	1000	..	..	..	..	4000	..	..	..	1800	..	10750	..	22750
Spring rice or Boro	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Continuation of the foregoing table.

Kangni by itself	..	..	700	..	50	900	..	650	..	..	400	900	..	600	20	250	600	5070
Do. followed by Masur	..	..	..	..	..	..	..	..	..	1000	..	..	..	400	..	..	..	1400
Do. do. Pease	..	..	300	..	100	..	..	..	..	1000	..	..	..	300	..	..	..	1700
Do. do. Barley	..	..	300	..	100	1800	..	650	..	2000	..	..	..	150	30	500	2500	8030
Do. do. Wheat	..	..	150	..	200	1800	..	3300	..	1000	..	..	..	150	50	250	600	7500
Do. do. Sarso	..	..	..	..	50	..	4500	50	..	..	400	..	..	..	..	250	300	5550
Do. mixed with Arahar	..	..	700	..	..	..	..	1350	..	2000	1200	3700	..	300	..	..	1500	10750
Do. do. Arahar and Cotton	..	..	..	..	..	..	..	..	..	400	..	..	..	..	..	..	..	400
Do. do. Arahar, Cotton and Ricinus	..	..	..	..	..	..	..	50	..	200	..	..	..	..	..	..	..	250
Do. followed by Mung and Ricinus	..	..	..	..	..	..	..	..	..	..	..	200	..	..	..	..	..	200
Do. do. Cotton	..	..	..	..	..	..	..	40	..	..	..	..	..	..	..	..	..	40
Do. mixed with Cotton and Ricinus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. followed by Poppy and Safflower	..	..	200	..	10	200	..	..	..	75	100	..	..	100	50	90	400	1225
Do. do. Ricinus	..	..	..	..	..	..	..	20	..	..	..	..	..	..	..	..	..	20
Broadcast Maruya by itself	..	..	700	..	..	..	..	..	..	..	..	..	..	..	..	..	..	700
Do. followed by Masur	..	..	300	..	..	..	..	..	..	600	..	..	..	..	..	..	..	900
Do. do. mixed with Linseed	..	..	450	..	..	..	..	..	..	..	..	..	..	..	..	..	..	450
Do. do. Pease	..	..	300	..	..	..	..	..	..	400	..	..	..	..	..	..	..	700
Do. do. Barley	..	..	150	..	..	..	..	..	..	1000	..	..	..	..	..	..	..	1150
Do. do. Barley mixed with pease	..	..	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	300
Do. do. Wheat	..	..	150	..	..	..	..	..	..	800	..	..	..	..	..	..	..	950
Do. do. Turi	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	200
Do. mixed with Bhadai Urid	..	..	200	..	..	1800	..	..	..	..	..	..	..	300	..	..	..	2300
Do. do. Arahar	20	..	700	..	250	3800	..	..	..	400	..	4700	..	600	..	1500	..	11970
Do. do. Arahar and Urid	..	..	..	..	..	..	..	..	..	500	..	..	..	..	..	500	..	1000
Do. do. Arahar and Cotton	..	..	..	..	..	..	..	..	500	..	..	..	..	..	..	..	..	500
Do. do. Arahar and Ricinus	..	..	..	..	..	..	..	..	750	500	..	..	..	..	..	..	..	1250
Do. do. Arahar, Barrosa Cotton and do.	..	..	..	..	..	..	..	..	500	..	..	..	..	..	..	..	..	500
Do. do. Cotton and Ricinus	..	..	..	..	..	..	..	..	..	200	..	..	..	..	..	..	..	200
Do. do. Barrosa Cotton	..	..	..	..	..	..	..	..	750	400	..	..	..	..	..	..	60	1210
Do. do. Beans or Sim	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
Do. followed by Poppy	..	..	400	..	..	..	..	..	..	..	..	..	..	..	..	..	..	400
Do. do. mixed with Safflower	..	..	..	..	..	200	..	..	..	..	..	..	50	200	..	..	..	450
Transplanted Maruya by itself	..	700	..	120	250	9500	5400	2000	..	..	1200	5600	1200	3600	1700	800	600	32670
Do. followed by Masur	..	700	..	..	..	900	..	..	..	..	800	..	..	300	..	..	..	2700
Do. do. pease	..	700	..	240	100	900	1750	3300	..	..	2000	1400	400	600	400	250	600	12640
Do. mixed with Arahar	..	..	..	..	..	..	..	..	..	..	..	..	1200	..	1700	..	1800	4700
Do. do. Urid	..	..	..	..	..	..	..	..	..	..	..	..	100	..	..	..	..	100
Do. followed by But	..	1800	..	..	250	1800	..	..	..	..	1200	..	..	..	..	..	..	5050
Do. do. Barley	..	1500	..	600	200	5000	900	1300	..	..	4100	7000	4100	600	3375	2700	1800	33175
Do. do. Barley mixed with pease	..	..	..	..	..	..	..	2000	..	..	..	..	..	300	..	..	..	2300
Do. do. do. But	..	..	..	..	200	..	..	3300	..	..	..	..	..	..	..	..	..	3500
Do. do. Wheat	..	..	..	240	200	..	4400	6700	..	..	2500	3700	4100	600	6750	1500	900	31590
Do. do. Turi or Ratai	..	..	..	..	100	..	900	300	..	..	..	..	..	..	..	250	300	1850
Do. do. Sarso	..	..	..	..	..	..	..	..	..	..	..	900	400	..	..	250	..	1550
Do. do. Rarhiya Cotton	..	..	..	..	..	..	100	350	..	..	400	..	..	200	200	100	..	1350
Do. mixed with Bhoga Cotton	..	..	..	..	20	..	..	..	..	..	..	..	..	..	..	..	..	20

Continuation of the foregoing table.

Do. followed by Poppy mixed with Safflower	..	60	..	150	..	..	250	..	20	..	800	550	50	..	200	400	200	2680
Sawang by itself	..	..	..	..	..	9500	..	..	50	..	..	..	..	1800	..	..	..	11350
Do. followed by Masur	..	..	..	..	..	..	..	..	..	400	..	..	..	..	..	..	..	400
Do. do. pease	..	..	..	..	..	..	..	..	..	600	..	..	..	..	..	..	..	600
Do. mixed with Arahar	..	..	..	..	..	..	..	..	1000	..	..	..	..	..	..	..	..	1000
Do. followed by Barley	..	..	..	..	..	..	..	..	..	100	..	..	..	..	..	..	..	100
Do. do. Wheat	..	..	..	..	..	..	..	..	..	800	..	..	..	..	..	..	..	800
Do. do. Linseed	..	..	..	..	..	..	..	..	250	..	..	..	..	..	..	..	..	250
Maize by itself	..	1800	4200	3000	250	9500	4400	5400	..	..	800	450	400	7200	340	1100	1250	40090
Do. followed by Masur	..	1800	..	..	..	900	..	3300	..	800	..	..	..	..	..	..	..	6800
Do. do. pease	..	1800	700	..	100	..	..	..	..	1200	..	450	400	1800	..	250	600	7300
Do. do. But	..	2700	..	..	..	..	..	..	..	..	..	..	..	..	700	..	..	3400
Do. do. Barley	200	1800	1400	..	200	900	900	3300	..	1600	2500	1400	1200	1800	700	4300	3100	25300
Do. do. mixed with pease	..	..	..	..	..	..	..	3300	..	..	..	..	..	..	..	..	..	3300
Do. do. Wheat	200	..	700	..	250	1800	2700	3300	..	1000	1600	450	1200	1800	1400	2200	1200	19800
Do. do. Turi	50	..	..	..	50	..	900	1350	..	..	..	450	100	..	350	..	600	3850
Do. do. Sarso	..	..	..	..	..	..	..	..	..	..	400	..	..	..	..	200	..	600
Do. mixed with Arahar	..	3500	5800	9400	350	1800	4400	6600	7800	800	800	1400	800	1400	100	..	1500	46450
Do. do. Arahar and Recinus	..	..	360	..	..	..	..	..	..	400	..	..	..	..	..	..	..	760
Do. do. Cotton (Jagar)	..	..	700	1200	..	..	..	..	..	350	200	..	..	300	..	..	100	2850
Do. do. Arahar and Cotton Barr	..	50	..	..	20	..	..	..	..	200	..	..	..	..	..	..	..	270
Do. followed by Rarhiya Cotton	..	..	..	..	..	..	..	550	..	..	200	200	50	..	..	100	..	1100
Do. mixed with Kangni and Cotton	..	..	..	600	..	..	..	..	..	..	..	..	..	..	..	..	..	600
Do. do. Kangni and Potatoes	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	75
Do. do. Cotton and Recinus	..	..	..	..	..	..	..	..	3900	200	..	..	..	..	..	..	..	4100
Do. do. Cotton, Arahar and Recinus	..	..	..	..	..	..	..	..	1300	100	..	..	..	..	..	..	..	1400
Do. followed by Poppy and Safflower	400	100	1100	250	..	300	250	..	..	274	1000	600	30	660	400	1000	600	6964
Do. do. do. and Garlic	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	200
Do. do. Potatoes	800	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	800
Do. do. do. and followed by Tarai	400	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	400
Do. do. do. Karela mixed with Papchi or Kachu	500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	500
Do. do. do. do. Papchi and Ol	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	200
Do. do. Salgam or Turnip do. Mathi	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
Kodai by itself	..	..	..	1200	..	..	..	..	..	..	..	..	..	..	..	..	..	1200
Kodo by itself	..	2800	2900	2400	500	14000	..	6700	..	2000	1200	2300	..	10800	..	5400	12500	63500
Do. mixed with Arahar	40	3500	2900	4800	2000	4800	..	6700	1300	..	5000	4700	12000	3600	..	16000	18600	85940
Do. do. Arahar and Til	..	..	..	..	500	..	..	..	..	..	..	..	..	..	..	..	3100	3600
Do. do. Arahar and Kudrum	..	900	..	1200	..	..	..	..	..	..	..	..	..	..	..	..	..	2100
Janera Raksa	..	..	150	..	..	..	..	..	..	..	..	..	..	..	..	..	..	150
Do. Masuriya	..	50	700	..	50	200	90	45	..	..	100	..	50	2000	50	50	..	3385
Do. Nurkatiya	..	..	..	..	..	..	..	..	1000	2000	..	1900	..	..	..	..	..	4900
Do. mixed with Bhetmash	..	..	..	..	..	..	..	..	..	2000	..	..	..	..	..	..	..	2000
Do. mixed with Til	..	30	700	..	20	..	..	..	15600	12000	..	..	..	..	..	..	..	28350
China Jathuya	..	150	..	..	..	..	..	..	..	..	100	..	40	..	..	..	..	290
Do. (Bhadai)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	200	..	..	200
Do. (Magra)	..	50	100	..	..	200	175	100	..	..	200	..	..	..	750	100	..	1675
Wheat by itself	60	3500	1400	6000	4000	75000	105000	67000	74000	20200	23700	18800	33000	12600	47400	10000	10900	512560

Continuation of the foregoing table.

Wheat mixed with But	20	1800	700	..	1000	..	..	..	..	2000	..	..	100	1400	5000	2000	3100	17120
Do. mixed with pease	..	..	..	..	..	..	..	..	20800	200	..	..	..	..	..	..	..	21000
Do. mixed with Barley (Gujai)	10	900	..	600	20	..	4500	3300	..	..	..	400	1200	1800	3400	1300	3100	20530
Do. mixed with Sarso	..	90	350	1200	25	1800	..	..	5200	200	2000	2300	800	300	..	..	1500	15705
Barley by itself	150	14000	2900	9400	250	3800	10500	6600	10400	12000	28700	28000	24700	10800	27000	11000	31000	231200
Do. mixed with pease	50	..	9000	1700	250	9500	2700	3300	18200	12000	4000	9400	6200	7200	1000	..	3100	87600
Do. mixed with But	20	11000	5800	2500	250	3800	4500	13400	7800	2000	8000	4700	2000	1800	6700	2600	9300	86170
Do. mixed with But and Linseed	..	3500	..	..	100	..	..	..	..	..	..	..	..	..	..	..	..	3600
Do. mixed with Sarso	..	..	..	..	..	..	..	..	..	1000	..	..	..	..	..	..	..	1000
Masur by itself	20	9200	1400	7000	800	19000	9000	10000	10400	6000	10000	9400	10300	5800	19000	4400	3100	134820
Do. mixed with Linseed	10	3500	16000	2400	250	9500	3600	3300	5200	1000	2000	2300	2000	1400	6700	1100	3100	63360
Do. mixed with pease	..	..	..	..	..	..	..	500	..	..	..	..	..	..	..	..	..	500
Do. mixed with Barley	..	..	..	..	..	..	..	..	..	1000	..	..	..	..	..	..	..	1000
Field pease (Hara Sugiya) by themselves	100	5000	4250	2000	1000	9500	18000	16800	10400	8100	8000	7000	6200	1800	6750	1600	2500	109000
Pease sown among the stubble	..	..	..	..	..	..	..	20000	..	..	2000	..	..	..	..	..	..	22000
Field pease (Kabali) by themselves	100	7000	2900	6000	500	950	9000	10000	36500	8100	4000	2300	2000	10800	5000	500	1800	107450
Pease sown among the stubble	..	..	..	..	..	..	..	300	..	..	..	..	..	..	..	..	..	300
Field pease (Dabli) by themselves	..	..	..	..	500	..	..	..	..	..	..	..	..	..	1700	500	5000	7700
Pease mixed with Sarso	..	..	..	1200	..	..	4500	..	..	2000	..	..	..	..	..	..	..	7700
Khesari sown among the stubble	..	..	..	..	..	19000	..	..	38945	4000	.	..	..	..	..	..	..	61945
Arahar by itself	..	..	700	100	..	9500	100	350	..	4000	400	400	500	300	400	400	..	17150
Do. mixed with Urid	..	..	..	..	..	4700	100	..	..	..	..	1000	100	1400	..	..	100	7400
Do. mixed with Kudram	..	..	..	..	..	4700	..	..	..	..	..	..	..	..	..	..	..	4700
Kulthi by itself	..	40	1400	100	50	15000	9000	35	4200	6000	4000	200	2000	1800	13500	11000	9300	77625
Urid Bhadai	..	..	..	..	..	1750	900	..	..	..	50	..	..	..	300	200	400	3600
Bhringgi or Mothi	..	10	..	100	20	..	..	..	..	..	..	..	..	..	6750	400	3100	10380
Mashkalai by itself after culture	..	200	180	..	..	..	..	..	..	1000	..	400	..	..	..	400	..	2180
Mung or Sehamung by itself	..	25	100	20	..	5000	375	50	..	..	..	40	50	2000	3400	200	80	11340
But or Chana by itself	100	28500	17500	9400	800	55000	26500	26800	13000	12000	8000	11700	14500	10800	27000	18000	18600	298200
But mixed with Linseed	50	14000	..	2400	1200	4000	9000	..	..	2000	..	2300	2000	1800	13500	2700	6200	61150
But Kabali by itself	..	..	..	..	..	..	..	..	..	2000	..	..	..	..	..	..	..	2000
Bora or Ghangra	..	..	..	..	..	..	40	..	..	..	..	..	..	..	..	..	..	40
Turi Ratai by itself	50	1800	2900	3500	2000	4000	13500	13500	10500	4000	2000	2300	2000	9000	6750	6700	6200	90700
Sarso by itself	..	900	900	1200	..	1000	27000	20000	..	200	6000	4700	8150	1800	3100	2700	3100	80750
Rayi or Mustard by itself	..	..	600	50	25	..	4500	..	5200	1000	..	400	..	..	..	..	..	11775
Rayi sown in the mud without culture	100	200	150	50	..	..	..	..	2600	400	..	400	..	..	..	..	..	3900
Linseed by itself	..	3500	700	..	..	9500	4500	20000	2600	2000	4000	7000	..	..	10000	1350	3100	68250
Til by itself	..	..	50	..	..	500	550	..	25	200	..	50	..	..	200	..	..	1575
Kudrum by itself	..	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40
Son or Sanayi	..	30	..	..	10	30	..	20	..	..	150	..	..	..	..	..	..	240
Tobacco by itself	..	..	..	..	..	20	..	45	190	..	..	..	20	100	..	50	80	505
Bettle leaf	..	..	..	..	..	10	25	10	..	10	10	..	..	..	..	..	..	65
Sugarcane Mango	..	..	80	..	..	350	2000	180	..	80	750	400	400	400	60	13	..	4713
Do. Ketari	..	..	120	..	..	900	100	40	..	56	3000	900	450	1000	..	..	400	6966
Sugarcanes Barukha	..	..	100	..	20	400	500	280	..	50	1750	600	950	500	40	10	800	6000
Sugarcane Reongra	..	..	..	..	10	..	..	..	..	..	..	..	..	..	..	..	1600	1610
Do. Sakkarchiniya	..	..	..	..	..	80	75	100	..	10	200	100	100	100	..	..	..	765

Continuation of the foregoing table.

Do. Paungdi	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..	..	..	10
Cotton Barsha	..	..	1400	..	..	2000	1100	..	..	400	650	200	..	..	200	..	200	6150
Do. Jasur	..	..	..	..	..	..	40	..	..	..	..	..	..	..	..	..	..	40
Do. (Bhiyara)	..	..	..	..	..	..	..	..	40	..	..	..	..	..	..	..	100	140
Do. Rarhiya	..	40	1400	..	..	..	1200	..	..	100	500	750	..	..	500	100	400	4990
Do. mixed with pease	..	..	..	..	..	3000	..	..	..	..	..	..	..	..	..	60	..	3060
Do. mixed with Sarso	..	..	..	..	..	..	..	..	..	..	500	..	..	..	..	..	..	500
Do. mixed with Sarso and pease (Hara)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	50	90
Do. mixed with Sarso and pease (Kabali)	..	..	..	..	..	..	700	..	..	..	350	..	..	..	..	..	..	1050
Indigo by itself, Phaguniya Baok	..	..	40	..	..	..	..	..	100	..	..	..	..	..	..	..	..	140
Do. Ashariya Baok, 1st year	..	..	60	50	..	..	45	5	200	2000	15	750	10	10	..	..	{1000 / 1100}	5245
Do. Do. 2d year	..	..	60	50	..	..	..	5	..	2000	15	750	10	10	..	..	1000	3900
Indigo for plant alone, 1st year	..	..	20	25	..	..	..	..	..	50	3	100	..	..	..	..	75	273
Indigo for plant and seed, 2d year	..	..	20	25	..	..	5	..	80	50	2	100	..	..	..	..	75	357
Poppy mixed with Safflower	160	240	2400	..	230	400	800	1815	..	350	1200	1200	620	4620	1000	2400	2800	20235
Do. mixed with Safflower and Dhuniya	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40
Do. followed by China	..	..	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
Do. mixed with Safflower and Garlic	..	..	..	3125	..	100	..	..	..	..	..	300	..	..	..	..	..	3525
Safflower by itself	..	175	50	..	..	40	40	200	..	10	350	100	..	..	100	10	..	1075
Do. mixed with Sarso	..	..	..	..	..	..	..	..	..	40	..	..	..	..	..	..	..	40
Do. mixed with Ricinus	..	..	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..	10
Carrots by themselves	..	40	40	..	10	40	..	45	..	40	45	40	200	50	100	50	60	760
Do. and Mooli	..	..	..	..	..	..	..	..	..	40	..	..	..	..	..	..	..	40
Suthni by themselves	..	..	..	..	..	20	20	..	..	40	20	20	..	..	..	..	..	120
Potatoes by themselves	..	80	..	40	50	200	..	..	..	40	..	100	..	..	..	10	200	720
Do. followed by Torai	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100
Do. followed by Karala mixed with Kachu	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100
Do. do. mixed with Kachu and Ol	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
Do. followed by Chowlai Sak	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40
Do. mixed with Ricinus	..	..	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..	40
Sakarkund	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100	40	50	190
Ginger	..	..	..	..	..	20	240	..	..	..	..	..	..	..	..	..	..	260
Turmeric	..	..	..	..	..	40	20	..	..	..	..	..	..	..	..	..	..	60
Peyaj or Onions	250	30	25	80	10	200	40	40	10	40	20	100	50	100	75	50	40	1160
Garlic	..	10	25	..	..	20	10	..	10	40	20	40	20	50	..	..	20	265
Dhaniya by itself	..	..	..	..	..	200	..	40	40	..	20	..	..	..	..	..	..	300
Methi by itself	..	..	..	..	..	20	..	50	..	..	20	..	..	..	..	..	..	90
Jira	..	..	..	..	..	..	200	3800	..	..	..	..	..	..	..	..	..	4000
Saongp	..	..	..	..	..	..	20	..	..	..	..	..	..	..	..	..	..	20
Ajoyan by itself	..	..	..	..	..	..	..	40	..	..	20	..	..	..	..	..	..	60
Channani	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..	..	..	10
Ricinus (Ghaungdiya)	..	50	350	..	..	5000	700	80	..	600	500	2800	350	2000	100	300	200	13030
Do. Chanaki	..	..	200	200	..	..	1100	100	..	..	250	900	100	1000	..	..	400	4250
Do. mixed with Safflower	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Seedling Land by itself	13	1160	650	300	205	8000	7060	6840	30	1600	6200	2250	2080	8600	2000	1500	1610	50118
Total	28800	228480	184320	149760	67200	1219200	1142400	860160	334080	259200	526080	600960	528000	462720	432000	343680	397440	7764480

Explaining the Cultivation of Grain, &c. in the Division of Patna City. (This is given as an illustration of the whole district.)

Kinds.	Number of double ploughings.	Number of hoeings.	Seed time.	Quantity of seed required for one bigah in sers.	Number of smoothings with the Chauki.	Number of weedings with the spud.	Number of waterings.	Harvest Season.	Average produce of one bigah in sers.	Average number of sers sold at harvest for one Rupee.	Number of bigahs cultivated in this manner.	Total produce in Mans and Sers.	Total value in Rupees and Anas.	Produce for consumption after deducting seed in Mans and Sers.
Fruit trees	—	—	—	—	—	—	—	—	—		3500	—	45500	—
Bamboos	—	—	—	—	—	—	—	—	—		2	—	20	—
Kitchen gardens	—	—	—	—	—	—	—	—	—		1000	—	20000	—
Vegetables in the fields	—	—	—	—	—	—	—	—	—		400	—	10000	—
Broadcast winter rice by itself	4	—	1 June	8	2	1	—	15 Nov.	200	60	200	1000	666 10	960
Broadcast winter rice followed by	4	—	1 June	8	2	1	—	15 Nov.	200	60	600	3000	2000	2880
Kheshari sown among the stubble	—	—	16 Sept.	8	—	—	—	1 March	80	90		1200	533 5	1080
Broadcast winter rice followed by	4	—	1 June	8	2	1	—	15 Nov.	200	60	50	250	166 10	245
But sown among the stubble	—	—	16 Sept.	10	—	—	—	1 March	80	70		100	57 2	87 20
Transplanted winter rice by itself	3 or 4	—	1 June	16	2	—	—	1 Dec.	240	60	100	600	400	560
Transplanted winter rice followed by	3 or 4	—	1 June	16	2	—	—	1 Dec.	240	60	200	1200	800	1120
Kheshari sown among the stubble	—	—	1 Oct.	8	—	—	—	1 March	80	90		400	177 12	360
Broadcast Maruya mixed with	4	—	1 June	1¼	2	1	—	15 Aug.	120	70	20	60	34 4	59 15
Arahar				1				1 April	120	60		60	40	59 20
Broadcast Maruya mixed with	4	—	1 June	1¼	2	1	—	15 Aug.	120	70	20	60	34 4	59 15
Beans or Sem used green				—				1 Nov.	200	80		100	50	100
Maize mixed with	4	1	1 June	2½	2	1	4 or 6	1 Aug.	320	80	75	600	300	595 12[illegible]
Kangni followed by				½				1 Aug.	60	50		112 20	90	111 22[illegible]
Potatoes	6	2	1 Sept.	50	4	1	10	1 Jan.	1600	80		3000	1500	2906 10

Continuation of the foregoing table.

Maize followed by	3 or 4	1	1 May	2½	1or2	1	4 or 6	1 July	320	80	200	1600	800		1587 20
Barley	4	—	1 Oct.	15	2	1	4 or 6	1 March	200	60		1000	666	10	925
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80	200	1600	800		1587 20
Wheat	6	—	1 Oct.	20	2	1	8	1 March	200	40		1000	1000		900
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80	50	400	200		396 35
Turi	4	—	1 Oct.	1	1	—	2 or 3	1 Jan.	120	35		150	171	7	148 30
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80	—	3200	1600		3175
								15 Jan.	4	7½		40	3413	5	40
Poppy mixed with	6	—	16 Sept.	2½	4	4	12or14	5 Feb.	80	30	400	800	1066	10	775
Safflower				½				25 Jan.	3	6		30	200		30
								10 Feb.	30	70		300	171	7	285
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80		1600	800		1587 20
								15 Jan.	4	7½		20	1706	10	20
Poppy mixed with				2½	—	—	—	—	—	—					
								5 Feb.	80	30	200	400	533	5	387 20
								15 Jan.	3	6		15	100		15
Safflower and	6	—	16 Sep.	½	2	4	10or14	—	—	—					
								5 Feb.	30	70		150	35	11	147 20
Garlic or Rasun				5	—	—	—	1 March	40	60		200	133	5	175
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80	800	6400	3200		6350
Potatoes	6	2	1 Oct.	50	2	1	10	20 Jan.	1800	80		36000	18000		35000
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80	400	3200	1600		3175
Potatoes followed by . .	4 or 6	1	15 Sept.	50	2	1	10	1 Jan.	1800	80		18000	9000		17500
Torai	—	—	1 Feb.	1	—	1	—	1 June	4000	2000		40000	8000		40000
Maize followed by	4	1	1 May	2½	2	1	4 or 6	1 July	320	80	500	4000	2000		3968 30
Potatoes followed by . .	4 or 6	1	15 Sept.	50	2	1	10	1 Jan.	1800	800		22500	11250		21875
Karela mixed with	2 or 3	1	1 Jan.	2	1	1	30	15 April	1600	100		20000	8000		2000
Popchi or Kachu			1 March	40				1 Sept.	400	100		5000	2000		4500
Maize followed by	4	1	1 May	2½	2	1	4 or 5	1 July	320	80	200	1600	800		1587 20
Potatoes followed by . .	4 or 6	1	15 Sept.	50	2	1	10	1 Jan.	180	80		9000	4500		8750
Karela mixed with			1 Jan.	2		—		15 April	1600	80		8000	4000		8000
Popchi or Kachu and . .	2 or 3	1	1 March	40	1	1	30	1 Sept.	400	100		2000	800		1800
Ol				20				1 Oct.	200	60		1000	666	10	900

Continuation of the foregoing table.

Maize followed by	4	1	1 May	2½	2	1	4 or 5	1 Aug.	320	80		400	200		196	35
Salgam or Turnip	—	—	20 Aug.	¼	2	2	8 or 10	1 Oct.	600	50	50	750	600		750	
and Mathi				5				2 Sept.	200	40		250	250		250	
Kodo mixed with	3	—	1 June	2	1	1	—	1 Oct.	160	70	40	160	91	7	158	
Arahar				¾				1 April	120	60		120	80		119	
Wheat by itself	4	—	1 Oct.	20	2	1	—	1 March	240	40	60	360	360		330	
Wheat mixed with	4	—	1 Oct.	13½	2	—	—	1 Mar.	240	60	20	120	80		110	
ut				6¾				1 Mar.								
Vheat mixed with	4	—	1 Oct.	13½	2	—	—	1 March	240	60	10	60	40		55	
Barley				6½												
Barley by itself	4	—	1 Oct.	15	2	—	—	1 March	200	60	150	750	500		693	30
Barley mixed with	4	—	1 Oct.	10	1or2	—	—	1 March	240	70	50	300	171	7	281	10
Pease				15												
Barley mixed with	4	—	1 Oct.	10	1or2	—	—	1 March	240	60	20	120	80		112	20
But				5												
Masur by itself	2 or 3	—	1 Oct.	6	1	—	—	11 Feb.	160	70	20	80	45	11	77	
Masur mixed with	2 or 3	—	1 Oct.	6	1	—	—	11 Feb.	160	70	10	40	22	13	38	20
Linseed				1				11 Feb.	20	45		5	4	6	4	30
Pease Yasuriya by themselves	2 or 3	—	1 Oct.	12	1	—	—	11 Feb.	160	80	100	400	200		370	
Kabali pease by themselves	2 or 3	—	1 Oct.	10	1	—	—	11 Feb.	200	70	100	500	285	11	475	
But by itself	2 or 3	—	1 Oct.	12	1	—	—	1 March	160	70	100	400	228	9	370	
But mixed with	2 or 3	—	1 Oct.	12	1	—	—	1 March	160	70	50	200	114	4	185	
Linseed				1				1 March	20	15		25	22	3	23	30
Turi by itself	4	—	1 Oct.	1	2	—	—	1 Jan.	160	35	50	200	228	9	198	30
Rayi sown in the mud without culture	—	—	16 Sept.	1½	—	—	—	1 Feb.	120	40	100	300	300		296	35
								15 Jan.	5	7½		20	1706	10	20	
Poppy mixed with	6 or 8	1	15 Sept.	2½	2	4	10or14	5 Feb.	80	30	160	320	426	10	310	
Safflower				1				15 Jan.	4	6		16	106	10	16	
								10 Feb.	50	70		200	114	4	196	

Continuation of the foregoing Table.

	—	—	—	—	—	—	—	15 Jan.	5	7½		5	426 10	5
Poppy mixed with . . .	—	—	—	2½	—	—	—							
	—	—	—	—	—	—	—	5 Feb.	80	30		80	106 10	77 20
	—	—	—	—	—	—	—	15 Jan.	4	6	40	4	26 10	4
Safflower and . . .	6 or 8	—	15 Sept.	1	4	4	12 or 14							
	—	—	—	—	—	—	—	10 Feb.	50	70		50	28 9	49
Dhuniya	—	—	—	2	—	—	—	1 March	40	30		40	53 5	38
Potatoes followed by . .	6	—	15 Sept.	50	2	1	10	1 Jan.	2400	80	40	2400	1200	2350
Choulayi Sakh . . .	2 or 3	—	15 Jan.	½	1	30	30	15 Feb.	1600	200		2000	400	2000
Potatoes followed by . .	6	1	16 Sept.	50	2	1	8 or 10	1 Jan.	2400	80	100	6000	3000	5875
Torai	—	1	1 Feb.	—	—	1	—	1 June	2400	200		6000	1200	6000
Potatoes followed by . .	6	1	16 Sept.	50	2	1	8 or 10	1 Jan.	2400	80		6000	3000	5875
Karala mixed with . . .			1 Jan.	—	—	—		15 April	1600	80		4000	2000	4000
	2 or 3	1	—	—	1	1	25or30				100			
Papchi or Kachu . . .			1 Mar.	40	—	—	—	1 Sept.	600	100		1500	600	1400
Potatoes followed by . .	6	1	16 Sept.	50	2	1	8 or 10	1 Jan.	2400	80		3000	1500	2937 20
Kurala mixed with . . .	—	—	1 Jan.	—	—	—	—	15 April	1600	80		2000	1000	2000
Papchi or Kachu and . .	2 or 3	1	1 Mar.	40	1	1	25or30	1 July	500	100	50	625	250	575
Oil	—	—		20	—	—	—	1 August	160	60		200	133 5	175
Piyaj	—	—	1 Nov.	—	2	2	30	1 May	1600	120	250	10000	3333 5	10000
										Total .	10787		194152 7	
										Rice Seedlings alone .	13			
										Houses	18000			
										Total .	28800	Per bigah	as. gds. 6—11 17	

Number of Hindu Academicians in the districts of Patna City and Zila Behar and their Scholars.

Grammar 2; Do. and Legend 4; Astrology 5; Do. 4; Do. 3; Grammar and Legend 4; Do. do. 6; Grammar 4; Do. and Law 4; Do. do. 12; Grammar, Law, and Legend 4; Grammar and Medicine 3; Grammar 2; Do. and Medicine 4; Grammar 4; Do. 4; Do. and Astrology 4; Do. and Law 5; Astrology 2; Grammar 2; Do. and Legend 4; Do. and Law 0; Grammar 4; Do. 5; Astrology 15; Grammar 4; Do. 2; Do. 3; Do. and Legend 5; Do. and Medicine 5; Grammar 4; Do. 5; Do. and Astrology 5; Do. do. 5; Do. and Medicine 5; Do. and Magic 2; Do. and Law 10; Do. and Legend 8; Metaphysics and Grammar 10; Grammar 4; Do. and Law 4; Do. and Legend 4; Do. do. 6; Do. do. and Law 6; Grammar 4; Do. 4; Do. 15; Do. 4; Do. 2; Do. 10; Do. 15; Do. 10; Do. 10; Do. 2; Do. 4; Do. 3.

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General Abstract of the value and produce of lands occupied by farmers who cultivate with the plough in the District of Patna City and Zila Behar.

Division or Thanah.	Fruit trees value of fruit Rupees.	Bamboos value cut annually in Rupees.	Vegetables, &c. in gardens and fields value in Rupees.	Grain. Rice. Quantity of Mans.	Rice. Value in Rupees.	Rice. Remaining for consumption after deducting seed.	China Kangni Saya Maruya Maize Kodo Jenera, &c. Quantity of Mans.	China Kangni &c. Value in Rupees.	China Kangni &c. Remaining for consumption after deducting seed.	Wheat and Barley. Quantity of Mans.	Wheat and Barley. Value in Rupees.	Wheat and Barley. Remaining for consumption after deducting seed.	Pulse. Quantity of Mans.	Pulse. Value in Rupees.	Pulse. Remaining for consumption after deducting seed.
Patna city	45500	20	116419	6050	4033	5765	24992	12549	24676	3710	2898	3395	3500	1785	3221
Phatuha	17500	60	11361	383250	199977	360759	82955	43630	81397	151370	89884	142012	402962	210724	374272
Noubutpur	7200	150	6293	346050	183328	325430	120152	56153	108066	124100	68294	115755	210205	119808	202005
Bakipur-Jaywar	10000	15	7149	385030	230683	366683	87975	38365	86686	124707	78449	117639	244200	125874	225260
Sherpur	6000	20	3313	299340	140873	288737	31775	14914	31494	44550	35166	41758	73802	35867	69920
Total..	86200	265	144538	1419720	758895	1347375	347850	165613	332320	448437	274692	420559	934670	494064	874680
Gaya	72000	30	70666	4994025	2660538	4732835	347050	157964	343415	530687	390767	490932	1034525	571502	965115
Nawada	70000	30	24550	4482600	1793040	4216637	101382	42295	91773	551550	342771	498455	1020147	534640	909475
Sheykpurah	50000	30	40241	2960512	1266596	2774375	230787	120817	228120	432700	266783	398252	556512	267440	509181
Duriyapur	50400	40	10833	40120	20060	37874	155787	86725	153829	545600	392533	489760	429215	235643	397520
Bar	24300	150	10148	422202	210034	396269	..	116076	..	351500	233921	323560	..	185553	..
Behar	49200	200	9623	2481200	1101866	2387900	131950	52683	130586	471800	268825	407630	653050	294327	604175
Helsa	93500	80	15695	2296400	1143550	2183437	164245	79401	161984	436500	287049	408075	759505	337330	708671
Holasgunj	47500	60	9858	2124512	1062256	2040382	106782	53702	105390	419250	310393	388555	893462	409656	811197
Jahanabad	43200	800	9691	1774325	788588	1679570	169895	80305	167672	231200	141928	211700	183450	100166	167331
Daudnagar	28500	30	11813	1080625	614337	1017955	81775	37947	81021	534772	441514	515660	593862	329759	548565
Arwal	10000	21	5528	1178625	670731	1120552	159562	69186	157332	213075	144417	199062	350630	191164	314718
Vikram	20800	120	8581	1000375	547047	950950	227315	110107	185041	361475	229191	332795	457960	250943	422486
	559400	1591	227231	24835522	11878647	23538739	2083366	1007211	2011674	5080110	3450099	4664438	7252545	3708129	6665322
Total..	645600	1856	371769	26255242	12637543	24876114	2431216	1172825	2343994	5528547	3724791	5084997	8187215	4202189	7540002

Continuation of the foregoing table.

Division or Thanah.	Grain. Sarisha or Turi Linseed and Til. Quantity of Mans.	Value in Rupees.	For consumption after deducting seed.	Sugarcane. Quantity of Mans.	Value in Rupees.	Plants for making thread and rope. Pata&San. Quantity of Mans.	Value in Rupees.	Cotton. Quantity of Mans.	Value in Rupees.	Plants for makings & chewing. Betle. Value in Rupees.	Tobacco. Quantity of Mans.	Value in Rupees.	Opium. Quantity of Mans.	Value in Rupees.	Plants used for dying. Indigo. Value in Rupees.	Safflower. Quantity of Mans.	Value in Rupees.	Ricinus. Quantity of Mans.	Value in Rupees.	Remaining for consumption deducting seed.	Total value of each Thanah.
Patna city	680	726	672	..	..	..	..	..	..	..	..	..	85	7253	..	65	433	..	..	..	194152
Phatuha	20459	20365	20043	..	..	101	165	85	212	..	..	..	37	3178	..	78	568	125	111	122	598880
Noubutpur	19473	18007	18961	3200	4266	60	80	6300	16391	..	..	..	473	49426	733	420	2423	1780	1582	1748	537060
Bakipur-Jaywar.	18237	21230	18002	..	..	150	200	1500	4000	..	..	..	430	36746	412	430	2870	680	680	664	567117
Sherpur	8336	8254	8215	300	342	25	50	55	146	..	..	..	23	1910	..	32	162	30	30	29	247865
Total..	67186	68583	65895	3500	4609	336	495	7940	20750	..	..	..	1050	89515	1145	1026	6458	2615	2403	2564	2145076
Gaya	44325	39322	43519	23790	27188	2410	3229	17000	43833	3000	40	80	127	10200	..	240	1603	15000	13333	14750	4068903
Nawada	135662	144228	133262	33450	35942	..	..	7330	20155	10000	..	..	153	12250	83	198	1324	2250	2250	2070	3037125
Sheykhpurah ...	135175	118895	133179	10050	13399	35	70	1930	5938	3000	67	270	226	19360	49	211	1692	670	670	659	2179958
Duriyapur	51943	47201	50878	..	..	..	..	3952	11871	..	380	950	1	120	407	2	16	3868	3868	3788	860899
Bar	23590	26769	23176	2447	2796	..	..	2898	8586	3000	..	..	63	5516	6150	92	779	2525	2525	2460	838182
Behar	36762	38052	36063	85530	97748	225	360	6300	18916	4000	..	..	292	25593	52	595	4760	1875	1500	1806	197667
Helsa	42200	41904	41359	23750	27142	..	..	2350	5875	..	..	..	273	21900	2479	353	2624	9425	9425	9210	2075086
Holasgunj	47600	57490	46433	23400	31199	..	..	175	466	..	70	140	73	5870	76	16	108	1325	1325	1302	1991438
Jahanabad	29550	29592	28843	23750	24464	..	..	675	1928	..	225	750	677	57424	35	144	960	10250	10250	10100	1301768
Daudnagar	67775	66137	66254	1150	1533	..	..	4950	14142	..	..	..	154	12300	..	300	2500	350	350	345	1565761
Arwal	40387	46213	39897	262	349	..	..	1185	3266	..	100	333	449	35920	..	706	4706	600	600	581	1193011
Vikram	47675	51589	46980	31200	41599	..	..	2280	6033	..	200	533	470	37600	5324	570	3039	1800	1800	1785	1327691
	702646	707396	689848	258779	303366	2670	3659	55025	141014	23000	1082	3056	2963	244054	14660	3430	24114	49938	47897	48857	22416505
Total..	769832	775980	755744	262279	307975	2946	4154	62905	161764	23000	1082	3056	4013	333569	15806	4456	30573	52603	50300	50421	24561581

Explanatory of the Loss in cleaning the Rice in the Husk as usually exposed to market in Patna, and of separating the husk without boiling.

Kind of Rice.	18 measures or 1944 cubical inches of market rice in the husk.			16 measures of grain clean in the husk, or 1728 cubical inches weigh.	The preceding when beaten, without boiling, gives							
	Weigh.	When cleaned give of grain in the husk.			Rice.		Broken grains.		Husks.		Bran.	
	Ounces.	Inches.	Ounces.	Ounces.	Inches.	Ounces.	Inches.	Ounces.	Inches.	Ounces.	Inches.	Ounces.
Purbiya Aswiniya	643½	1802¼	618	593	706½	298	103½	45½	849½	126	280	83½
Beloriya . .	647	1830	618½	584	784	357	104	43½	1098	115	216	68
Sela . . .	565	1728	532	532	693	315	78	35	1188	136	126	42½
Patasi Sela .	563	1701	538	538	667	306	68	29½	1188	121	261	72
Ramni . .	668	1854	662	617	729	334	122	55	1143	128	324	88
Khera . .	645½	1786½	595½	582½	666	315	90	42	949½	143	283½	83½
Sela Maghaiya .	621	1896	606	551	743½	339	94½	42½	1040	111	279	58
Dolan . .	619½	1836	599	563	706½	320	121½	51½	891	114½	324	70
Gauriya . .	631	1890	607	565	720	334½	81	37	931½	117	283½	62
Basmati . .	606	1791	580	560	814½	364	45	22	1170	118	292½	60
Total .	6209½	18114¾	5956¼	5685½	7230	3282½	907½	403½	10448½	1229½	2669½	687½
Average .	621	1811½	595¾	568½	723	328¼	90¾	40¼	1044¾	123	267	68¾

Estimate of the Live Stock in Patna City and Zila Behar—(under each Thanah.)

	Patna city.		Phatuha.		Noubutpur.		Bakipur-Jaywar.		Sherpur.		Gaya.		Nawada.		Sheykhpurah.		Duriyapur.	
	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.
Bulls reserved for breeding	30	—	125	—	125	—	165	—	40	—	1500	—	200	—	1000	—	100	—
Do. wrought in the plough belonging to the high castes	100	500	2200	13200	1800	9000	300	1500	710	3550	23500	123375	4630	30095	2388	14328	100	400
Oxen used in wheel carriages for passengers alone	160	3200	—	—	—	—	40	640	2	30	24	528	2	30	—	—	—	—
Oxen used in carts for carrying passengers or goods	400	6400	20	350	—	—	60	900	6	72	100	1700	18	225	—	—	50	650
Oxen used for carrying back loads belonging to traders	2000	35000	4000	70000	200	300	500	6250	250	2750	6000	75000	5000	62500	5000	80000	260	2990
Oxen used for carrying back loads belonging to farmers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	460
Oxen used both in the plough and for carrying loads or to draw carts	—	—	2000	16750	3600	31500	—	—	660	3960	—	—	—	—	200	1000	—	—
Oxen used in machinery .	1000	5500	500	2500	80	320	200	1000	60	240	1200	6000	175	787½	500	2000	200	900
Do. used in the plough alone belonging to the high castes	150	1200	12450	99600	7350	64312½	8700	21350	2350	14100	92150	598975	53830	349895	74440	516427½	29220	171667½
Oxen used in the plough belonging to tradesmen	—	—	520	4290	740	6475	757	8327	1000	6000	10680	69420	6730	43745	7850	54950	2920	19710
Oxen used in the plough belonging to mere farmers	2750	22000	18250	141437½	15430	135012½	13800	144900	6685	40110	61700	401050	83000	539500	68170	545360	14610	87660
Buffaloes used in the plough	—	—	200	1000	—	—	50	200	—	—	1200	5400	1200	7200	2500	11250	—	—
Milch Buffaloes . .	1000	14000	1400	19600	500	6750	1000	16000	200	1800	3000	39000	2000	28000	3000	42000	10000	175000
Cows belonging to high castes	900	6750	2720	20400	2520	11025	2080	11440	976	4392	45423	295249½	59550	327525	24090	132495	17610	88050
Cows belonging to tradesmen	1300	9750	1025	7687½	420	1890	4858	26719	250	1125	32450	178475	32750	180125	18460	101530	1980	9900
Cows belonging to farmers	600	4500	18000	135000	3800	17100	4162	22891	2680	12060	129780	778680	98220	540210	53780	295790	8900	44500
Goats grown females .	2000	1000	1900	950	1000	500	1450	725	750	375	7000	3500	4000	2000	4000	2000	1700	850
Sheep called Garar breeding females . .	1100	687½	1000	500	200	125	1500	1125	100	62½	1500	937½	875	437½	1700	850	800	600
Swine total . . .	800	500	1000	1250	400	250	1500	750	700	350	15000	7500	4000	2750	2000	1000	2000	1000
Asses	350	1050	40	120	5	15	50	125	25	75	100	300	20	50	150	337½	10	25

Continuation of the foregoing table.

	Bar.		Behar.		Helsa.		Holasgunj.		Jahanabad.		Daudnagar.		Arwal.		Vikram.		Total	
	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Value.
Bulls reserved for breeding	100	—	300	—	730	—	200	—	100	—	350	—	40	—	30	—	5125	—
Do. wrought in the plough belonging to the high castes	1000	5500	2140	11770	1100	4400	2100	14700	7200	39600	3500	17500	5600	33600	1600	10400	59968	333418
Oxen used in wheel carriages for passengers alone	10	220	4	60	20	470	2	50	—	—	8	160	—	—	—	—	272	5388
[Ox]en used in carts for carrying passengers or goods	100	1250	16	240	30	300	8	140	—	—	200	3500	20	250	50	700	1078	16677
[O]xen used for carrying back loads belonging to traders	2000	25000	10000	150000	4000	56000	1000	15000	2500	28750	1500	22500	500	6250	800	11200	45510	652190
Oxen used for carrying back loads belonging to farmers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	460
Oxen used both in the plough and for carrying loads or to draw carts	2260	22600	1000	10000	100	750	—	—	2025	12150	—	—	1200	9000	300	3225	13345	110935
Oxen used in machinery .	300	1350	600	1800	200	700	300	1200	200	900	500	2000	125	625	200	1200	6340	29022½
Do. used in the plough alone belonging to the high castes	14825	118600	24840	203377½	25940	152397½	24930	174510	32400	240975	17200	89225	14700	110250	26400	128700	461875	3125562½
Oxen used in the plough belonging to tradesmen	1580	12640	4150	33200	2410	14460	2100	14700	2025	12150	2950	23600	1350	10125	1900	14012½	49662	347804½
Oxen used in the plough belonging to mere farmers	17480	139840	37325	298600	47160	277065	39470	276290	28340	177125	32300	250325	22000	165000	21875	164062½	530345	3805337½
Buffaloes used in the plough	400	2400	4000	18000	200	1100	1000	5500	600	3300	100	450	50	225	200	1200	11700	57225
Milch Buffaloes . . .	1000	13000	10000	140000	200	2600	500	6500	3000	36000	1200	10200	1000	13500	700	9800	39700	573750
Cows belonging to high castes	10480	68120	3500	20125	3040	10640	4430	31010	17900	71600	6540	32700	4000	24000	6600	33000	212359	1188521½
Cows belonging to tradesmen	2100	13650	10520	61805	860	3010	940	6580	1800	7200	4360	21800	1000	6000	1650	8250	116723	645496½
Cows belonging to farmers	18100	117650	14020	80615	44850	156975	18260	127820	16110	64440	23990	119950	11100	66600	9400	47000	475752	2631781
Goats grown females .	2100	1050	10000	5000	1000	500	6500	3250	4000	2000	5500	2750	3800	1900	1750	875	58450	29225
Sheep called Garar breeding females . .	1000	500	4700	2937½	600	225	500	187½	2000	750	1000	375	4500	1687½	4400	2200	27475	14187½
Swine total . . .	1500	1125	5000	1875	2000	1250	800	400	4000	2500	4000	2500	500	375	700	700	45900	26075
Asses	50	125	—	—	50	125	—	—	10	30	—	—	—	—	—	—	860	2377½
																	2162479	13595434

Estimate of the quantity of Milk procured by the owners of cattle in the District of Patna city and Zila Behar.

Division or Thanah.	Cows. Total number.	Cows. Number giving milk.	Cows. Average yearly produce of each cow in Sers.	Cows. Total milk in Mans & Sers.		Cows. Price of the milk in Sers.	Cows. Total value of milk in Rupees and Anas.		Buffaloes. Total number.	Buffaloes. Number giving milk.	Buffaloes. Average yearly produce of each buffalo in Sers.	Buffaloes. Total milk in Mans & Sers.		Buffaloes. Price of the milk in Sers.	Buffaloes. Total value of milk in Rupees and Anas.		Total. Total milk in Mans & Sers.		Total. Total value of milk in Rupees and Anas.	
Patna city	2800	1400	200	7000	..	33	8484	13	1000	500	400	5000	..	33	6060	10	12000	..	14545	7
Phatuha	21745	10872	200	54360	..	45	48320	..	1400	700	400	7000	..	45	6222	3	61360	..	54542	3
Noubutpur	6740	3370	150	12637	20	60	8425	..	500	250	430	2687	20	50	2150	..	15325	..	10575	..
Bakipur-Jaywar	11100	5550	150	20812	..	40	20812	..	1000	500	400	5000	..	40	5000	..	25812	..	25812	..
Sherpur	3906	1953	150	73287	30	45	6514	..	200	100	280	700	..	45	622	3	73987	30	7136	3
	46291	23145	850	168097	10	..	92555	13	4100	2050	1910	20387	20	..	20055	..	188484	30	112610	13
Gaya	207653	103826	144	373773	24	47	318102	2	3000	1500	468	17550	..	45	15600	..	391323	24	333702	2
Nawada	190520	95260	115	273872	20	43	254765	..	2000	1000	346	8650	..	45	7688	14	282522	20	262453	14
Sheykhpurah	96330	48165	126	251715	..	52	193646	3	3000	1500	300	11250	..	50	9000	..	262965	..	202646	3
Duriyapur	28490	14245	145	51637	20	24	84347	12	2000	1000	285	7125	..	33	8636	6	58762	20	92984	2
Bar	30680	15340	270	103520	..	36	115022	3	1000	500	440	5500	..	36	6111	8	109020	..	121133	11
Behar	28040	14020	160	56080	..	50	44864	..	10000	5000	320	40000	..	40	40000	..	96080	..	84864	..
Helsa	48750	24375	195	117619	15	45	140550	3	200	100	420	1050	..	45	933	5	118669	15	141483	8
Holasgunj	23630	11815	130	38398	..	45	34132	..	500	250	236	1475	..	32	1843	12	39873	..	35975	12
Jahanabad	35810	17905	140	62667	..	45	55704	..	3000	1500	405	15187	20	32	18984	6	77854	20	74688	6
Daudnagar	34890	17445	170	74141	..	40	74141	..	1200	600	255	3825	..	40	3825	..	77966	..	77966	..
Arwal	16100	8050	190	38237	..	35	43700	..	1000	500	250	3125	..	35	3600	..	41362	..	47300	..
Vikram	17650	8825	280	61775	..	50	49420	..	700	350	550	4812	20	50	3850	..	66587	20	53270	..
	758543	379271	2065	1503435	39	..	1408394	7	27600	13800	4275	119550	..	..	120073	3	1622985	39	1528467	10
Total	804834	402416	2915	1671533	9	..	1500950	4	31700	15850	6185	139937	20	..	140128	3	1811470	29	1641078	7

Estimate of the proportion of rent paid in the district of Behar and city of Patna by the high casts, dealers, artificers, and ploughmen; and of the proportion of the ploughs held by their owners or men of their families, by those who cultivate for a share, or by hired servants or slaves, &c.

Proportions of Rent.	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Rent paid by high castes .	2-64	24-64	22-64	20-64	20-6	36-64	28-64	32-64	38-64	28-64	20-64	9-64	24-64	28-64	16-64	14-64	28-64
Rent paid by merchants or shopkeepers .	22-64	2-64	4-64	1-64	4-64	1-64	4-64	1-64	few	3-64	1-64	1-128	4-64	4-64	2-64	1-64	4-64
Rent paid by artificers .	16-64	1-64		3-64		3-64		4-64	2-64		4-64	5-128			6-64	7-64	
Rent paid by ploughmen .	24-64	37-64	38-64	40-64	40-64	24-64	32-64	27-64	24-64	33-64	39-64	52-64	36-64	32-64	40-64	42-64	32-64
Ploughs held by persons who rent land and have stock	48-64	48-64	44-64	40-64	40-64	40-64	36-64	44-64	20-64	26-64	44-64	48-64	44-64	32-64	44-64	44-64	36-64
Ploughs held by persons who rent land but have no stock and are called Dhuriya .	..	..	..	..	..	..	..	..	4-64	4-64	..	..	..	..	..	..	..
Ploughs held by servants or slaves . . .	16-64	16-64	20-64	24-64	24-64	24-64	28-64	20-64	40-64	34-64	20-64	16-64	20-64	32-64	20-64	20-64	28-64
Proportion of rent farmed .	4-64	2-64	32-64	16-64	6-64	52-64	8-64	32-64	2-64	48-64	12-64	16-64	48-64	36-64	56-64	24-64	16-64
Proportion of rent collected by stewards . .	60-64	62-64	32-64	48-64	58-64	12-64	56-64	32-64	62-64	16-64	52-64	48-64	16-64	28-64	8-64	40-64	48-64
Proportion of rent paid in money . . .	whole	56-64	24-64	8-64	24-64	4-64	8-64	8-64	36-64	32-64	48-64	16-64	16-64	8-64	16-64	4-64	4-64
Proportion of rent arising from a division of crops .	few	8-64	40-64	56-64	40-64	60-64	56-64	56-64	28-64	32-64	16-64	48-64	48-64	56-64	48-64	60-64	60-64

An estimate of the number of cattle allowed for each plough in the different divisions of the Behar district and in that of the city of Patna.

Ploughs how Worked.	Patna city.		Phatuha.		Noubutpur.		Bakipur-Jaywar.		Sherpur.		Gaya.	
	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	4–64	25	100	25	20–64	25	16–64	25	8–64	23	24–64	25
Ploughs wrought by 3 oxen	8–64	18¾	52–64	18¾	20–64	18¾	16–64	18¾	16–64	17¼	8–64	18¾
Ploughs wrought by 2 oxen	36–64	12½ }	12–64	12½	24–64	12½	32–64	12½	40–64	11½	32–64	12½
Garden ground	16–64	3 }										

Ploughs how Worked.	Nawada.		Sheykhpurah.		Duriyapur.		Bar.		Behar.		Helsa.	
	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	16–64	30	16–64	30	16–64	28	24–64	28	8–64	30	4–64	30
Ploughs wrought by 3 oxen	16–64	22½	16–64	22½	24–64	21	20–64	21	8–64	22½	6–64	22½
Ploughs wrought by 2 oxen	32–64	15	32–64	15	24–64	14	20–64	14	48–64	15	54–64	15
Garden ground												

Ploughs how Worked.	Holasgunj.		Jahanabad.		Daudnagar.		Arwal.		Vikram.	
	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	12–64	30	8–64	25	20–64	30	16–64	30	16–64	30
Ploughs wrought by 3 oxen	12–64	22½	40–64	18¾	20–64	22½	8–64	22½	16–64	22½
Ploughs wrought by 2 oxen	40–64	15	16–64	12½	24–64	15	40–64	15	32–64	15
Garden ground										

General Abstract of the value and produce of lands occupied by farmers who cultivate with the plough in the District of Patna City and Zila Behar.

Division or Thanah.	Fruit trees value of fruit Rupees.	Bamboos value cut annually in Rupees.	Vegetables, &c. in gardens and fields value in Rupees.	Grain. Rice. Quantity of Mans.	Rice. Value in Rupees.	Rice. Remaining for consumption after deducting seed.	China Kangni Saya Maruya Maize Kodo Jenera, &c. Quantity of Mans.	China Kangni &c. Value in Rupees.	China Kangni &c. Remaining for consumption after deducting seed.	Wheat and Barley. Quantity of Mans.	Wheat and Barley. Value in Rupees.	Wheat and Barley. Remaining for consumption after deducting seed.	Pulse. Quantity of Mans.	Pulse. Value in Rupees.	Pulse. Remaining for consumption after deducting seed.
Patna city	45500	20	116419	6050	4033	5765	24992	12549	24676	3710	2898	3395	3500	1785	3221
Phatuha	17500	60	11361	383250	199977	360759	82955	43630	81397	151370	89884	142012	402962	210724	374272
Noubutpur	7200	150	6293	346050	183328	325430	120152	56153	108066	124100	68294	115755	210205	119808	202005
Bakipur-Jaywar	10000	15	7149	385030	230683	366683	87975	38365	86686	124707	78449	117639	244200	125874	225260
Sherpur	6000	20	3313	299340	140873	288737	31775	14914	31494	44550	35166	41758	73802	35867	69920
Total..	86200	265	144538	1419720	758895	1347375	347850	165613	332320	448437	274692	420559	934670	494064	874680
Gaya	72000	30	70666	4994025	2660538	4732835	347050	157964	343415	530687	390767	490932	1034525	571502	965115
Nawada	70000	30	24550	4482600	1793040	4216637	101382	42295	91773	551550	342771	498455	1020147	534640	909475
Sheykpurah	50000	30	40241	2960512	1266596	2774375	230787	120817	228120	432700	266783	398252	556512	267440	509181
Duriyapur	50400	40	10833	40120	20060	37874	155787	86725	153829	545600	392533	489760	429215	235643	397520
Bar	24300	150	10148	422202	210034	396269	..	116076	..	351500	233921	323560	..	185553	..
Behar	49200	200	9623	2481200	1101866	2387900	131950	52683	130586	471800	268825	407630	653050	294327	604175
Helsa	93500	80	15695	2296400	1143550	2183437	164245	79401	161984	436500	287049	408075	759505	337330	708671
Holasgunj	47500	60	9858	2124512	1062256	2040382	106782	53702	105390	419250	310393	388555	893462	409656	811197
Jahanabad	43200	800	9691	1774325	788588	1679570	169895	80305	167672	231200	141928	211700	183450	100166	167331
Daudnagar	28500	30	11813	1080625	614337	1017955	81775	37947	81021	534772	441514	515660	593862	329759	548565
Arwal	10000	21	5528	1178625	670731	1120552	159562	69186	157332	213075	144417	199062	350630	191164	314718
Vikram	20800	120	8581	1000375	547047	950950	227315	110107	185041	361475	229191	332795	457960	250943	422486
	559400	1591	227231	24835522	11878647	23538739	2083366	1007211	2011674	5080110	3450099	4664438	7252545	3708129	6665322
Total..	645600	1856	371769	26255242	12637543	24876114	2431216	1172825	2343994	5528547	3724791	5084997	8187215	4202189	7540002

Continuation of the foregoing table.

Division or Thanah.	Grain. Sarisha or Turi Linseed and Til.			Sugarcane.		Plants for making thread and rope. Pata&San.		Cotton.		Plants for makings & chewing. Betle.	Tobacco.		Opium.		Plants used for dying. Indigo.	Safflower.		Ricinus.			Total value of each Thanah.
	Quantity of Mans.	Value in Rupees.	For consumption after deducting seed.	Quantity of Mans.	Value in Rupees.	Quantity of Mans.	Value in Rupees.	Quantity of Mans.	Value in Rupees.	Value in Rupees.	Quantity of Mans.	Value in Rupees.	Quantity of Mans.	Value in Rupees.	Value in Rupees.	Quantity of Mans.	Value in Rupees.	Quantity of Mans.	Value in Rupees.	Remaining for consumption deducting seed.	
Patna city.....	680	726	672	..	..	..	..	..	..	..	..	..	85	7253	..	65	433	..	..	..	194152
Phatuha.......	20459	20365	20043	..	..	101	165	85	212	..	..	..	37	3178	..	78	568	125	111	122	598880
Noubutpur.....	19473	18007	18961	3200	4266	60	80	6300	16391	..	..	..	473	49426	733	420	2423	1780	1582	1748	537060
Bakipur-Jaywar.	18237	21230	18002	..	..	150	200	1500	4000	..	..	..	430	36746	412	430	2870	680	680	664	567117
Sherpur.......	8336	8254	8215	300	342	25	50	55	146	..	..	..	23	1910	..	32	162	30	30	29	247865
Total..	67186	68583	65895	3500	4609	336	495	7940	20750	..	..	..	1050	89515	1145	1026	6458	2615	2403	2564	2145076
Gaya..........	44325	39322	43519	23790	27188	2410	3229	17000	43833	3000	40	80	127	10200	..	240	1603	15000	13333	14750	4068903
Nawada........	135662	144228	133262	33450	35942	..	..	7330	20155	10000	..	..	153	12250	83	198	1324	2250	2250	2070	3037125
Sheykhpurah...	135175	118895	133179	10050	13399	35	70	1930	5938	3000	67	270	226	19360	49	211	1692	670	670	659	2179958
Duriyapur......	51943	47201	50878	..	..	..	..	3952	11871	..	380	950	1	120	407	2	16	3868	3868	3788	860899
Bar...........	23590	26769	23176	2447	2796	..	..	2898	8586	3000	..	..	63	5516	6150	92	779	2525	2525	2460	838182
Behar.........	36762	38052	36063	85530	97748	225	360	6300	18916	4000	..	..	292	25593	52	595	4760	1875	1500	1806	197667
Helsa..........	42200	41904	41359	23750	27142	..	..	2350	5875	..	..	..	273	21900	2479	353	2624	9425	9425	9210	2075086
Holasgunj.....	47600	57490	46433	23400	31199	..	..	175	466	..	70	140	73	5870	76	16	108	1325	1325	1302	1991438
Jahanabad.....	29550	29592	28843	23750	24464	..	..	675	1928	..	225	750	677	57424	35	144	960	10250	10250	10100	1301768
Daudnagar.....	67775	66137	66254	1150	1533	..	..	4950	14142	..	..	..	154	12300	..	300	2500	350	350	345	1565761
Arwal.........	40387	46213	39897	262	349	..	..	1185	3266	..	100	333	449	35920	..	706	4706	600	600	581	1193011
Vikram........	47675	51589	46980	31200	41599	..	..	2280	6033	..	200	533	470	37600	5324	570	3039	1800	1800	1785	1327691
	702646	707396	689848	258779	303366	2670	3659	55025	141014	23000	1082	3056	2963	244054	14660	3430	24114	49938	47897	48857	22416505
Total..	769832	775980	755744	262279	307975	2946	4154	62905	161764	23000	1082	3056	4013	333569	15806	4456	30573	52603	50300	50421	24561581

Explanatory of the Loss in cleaning the Rice in the Husk as usually exposed to market in Patna, and of separating the husk without boiling.

Kind of Rice.	18 measures or 1944 cubical inches of market rice in the husk.			16 measures of grain clean in the husk, or 1728 cubical inches weigh.	The preceding when beaten, without boiling, gives							
	Weigh.	When cleaned give of grain in the husk.			Rice.		Broken grains.		Husks.		Bran.	
	Ounces.	Inches.	Ounces.	Ounces.	Inches.	Ounces.	Inches.	Ounces.	Inches.	Ounces.	Inches.	Ounces.
Purbiya Aswiniya	643½	1802¼	618	593	706½	298	103½	45½	849½	126	280	83½
Beloriya . .	647	1830	618½	584	784	357	104	43½	1098	115	216	68
Sela . . .	565	1728	532	532	693	315	78	35	1188	136	126	42½
Patasi Sela .	563	1701	538	538	667	306	68	29½	1188	121	261	72
Ramni . .	668	1854	662	617	729	334	122	55	1143	128	324	88
Khera . .	645½	1786½	595½	582½	666	315	90	42	949½	143	283½	83½
Sela Maghaiya .	621	1896	606	551	743½	339	94½	42½	1040	111	279	58
Dolan . .	619½	1836	599	563	706½	320	121½	51½	891	114½	324	70
Gauriya . .	631	1890	607	565	720	334½	81	37	931½	117	283½	62
Basmati . .	606	1791	580	560	814½	364	45	22	1170	118	292½	60
Total .	6209½	18114¾	5956½	5685½	7230	3282½	907½	403½	10448½	1229½	2669½	687½
Average .	621	1811½	595¾	568½	723	328¼	90¾	40¼	1044¾	123	267	68¾

Estimate of the Live Stock in Patna City and Zila Behar—(under each Thanah.)

	Patna city.		Phatuha.		Noubutpur.		Bakipur-Jaywar.		Sherpur.		Gaya.		Nawada.		Sheykhpurah.		Duriyapur.	
	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.
Bulls reserved for breeding	30	—	125	—	125	—	165	—	40	—	1500	—	200	—	1000	—	100	—
Do. wrought in the plough belonging to the high castes	100	500	2200	13200	1800	9000	300	1500	710	3550	23500	123375	4630	30095	2388	14328	100	400
Oxen used in wheel carriages for passengers alone	160	3200	—	—	—	—	40	640	2	30	24	528	2	30	—	—	—	—
Oxen used in carts for carrying passengers or goods	400	6400	20	350	—	—	60	900	6	72	100	1700	18	225	—	—	50	650
Oxen used for carrying back loads belonging to traders	2000	35000	4000	70000	200	300	500	6250	250	2750	6000	75000	5000	62500	5000	80000	260	2990
Oxen used for carrying back loads belonging to farmers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	460
Oxen used both in the plough and for carrying loads or to draw carts	—	—	2000	16750	3600	31500	—	—	660	3960	—	—	—	—	200	1000	—	—
Oxen used in machinery .	1000	5500	500	2500	80	320	200	1000	60	240	1200	6000	175	787½	500	2000	200	900
Do. used in the plough alone belonging to the high castes	150	1200	12450	99600	7350	64312½	8700	21350	2350	14100	92150	598975	53830	349895	74440	516427½	29220	171667½
Oxen used in the plough belonging to tradesmen	—	—	520	4290	740	6475	757	8327	1000	6000	10680	69420	6730	43745	7850	54950	2920	19710
Oxen used in the plough belonging to mere farmers	2750	22000	18250	141437½	15430	135012½	13800	144900	6685	40110	61700	401050	83000	539500	68170	545360	14610	87660
Buffaloes used in the plough	—	—	200	1000	—	—	50	200	—	—	1200	5400	1200	7200	2500	11250	—	—
Milch Buffaloes . .	1000	14000	1400	19600	500	6750	1000	16000	200	1800	3000	39000	2000	28000	3000	42000	10000	175000
Cows belonging to high castes	900	6750	2720	20400	2520	11025	2080	11440	976	4392	45423	295249½	59550	327525	24090	132495	17610	88050
Cows belonging to tradesmen	1300	9750	1025	7687½	420	1890	4858	26719	250	1125	32450	178475	32750	180125	18460	101530	1980	9900
Cows belonging to farmers	600	4500	18000	135000	3800	17100	4162	22891	2680	12060	129780	778680	98220	540210	53780	295790	8900	44500
Goats grown females .	2000	1000	1900	950	1000	500	1450	725	750	375	7000	3500	4000	2000	4000	2000	1700	850
Sheep called Garar breeding females . .	1100	687½	1000	500	200	125	1500	1125	100	62½	1500	937½	875	437½	1700	850	800	600
Swine total . . .	800	500	1000	1250	400	250	1500	750	700	350	15000	7500	4000	2750	2000	1000	2000	1000
Asses	350	1050	40	120	5	15	50	125	25	75	100	300	20	50	150	337½	10	25

Continuation of the foregoing table.

	Bar.		Behar.		Helsa.		Holasgunj.		Jahanabad.		Daudnagar.		Arwal.		Vikram.		Total	
	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Total value.	No. of cattle.	Value.
Bulls reserved for breeding	100	—	300	—	730	—	200	—	100	—	350	—	40	—	30	—	5125	—
Do. wrought in the plough belonging to the high castes	1000	5500	2140	11770	1100	4400	2100	14700	7200	39600	3500	17500	5600	33600	1600	10400	59968	333418
Oxen used in wheel carriages for passengers alone	10	220	4	60	20	470	2	50	—	—	8	160	—	—	—	—	272	5388
Oxen used in carts for carrying passengers or goods	100	1250	16	240	30	300	8	140	—	—	200	3500	20	250	50	700	1078	16677
Oxen used for carrying back loads belonging to traders	2000	25000	10000	150000	4000	56000	1000	15000	2500	28750	1500	22500	500	6250	800	11200	45510	652190
Oxen used for carrying back loads belonging to farmers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	460
Oxen used both in the plough and for carrying loads or to draw carts	2260	22600	1000	10000	100	750	—	—	2025	12150	—	—	1200	9000	300	3225	13345	110935
Oxen used in machinery .	300	1350	600	1800	200	700	300	1200	200	900	500	2000	125	625	200	1200	6340	29022½
Do. used in the plough alone belonging to the high castes	14825	118600	24840	203377½	25940	152397½	24930	174510	32400	240975	17200	89225	14700	110250	26400	128700	461875	3125562½
Oxen used in the plough belonging to tradesmen	1580	12640	4150	33200	2410	14460	2100	14700	2025	12150	2950	23600	1350	10125	1900	14012½	49662	347804½
Oxen used in the plough belonging to mere farmers	17480	139840	37325	298600	47160	277065	39470	276290	28340	177125	32300	250325	22000	165000	21875	164062½	530345	3805337½
Buffaloes used in the plough	400	2400	4000	18000	200	1100	1000	5500	600	3300	100	450	50	225	200	1200	11700	57225
Milch Buffaloes . .	1000	13000	10000	140000	200	2600	500	6500	3000	36000	1200	10200	1000	13500	700	9800	39700	573750
Cows belonging to high castes	10480	68120	3500	20125	3040	10640	4430	31010	17900	71600	6540	32700	4000	24000	6600	33000	212359	1188521½
Cows belonging to tradesmen	2100	13650	10520	61805	860	3010	940	6580	1800	7200	4360	21800	1000	6000	1650	8250	116723	645496½
Cows belonging to farmers	18100	117650	14020	80615	44850	156975	18260	127820	16110	64440	23990	119950	11100	66600	9400	47000	475752	2631781
Goats grown females .	2100	1050	10000	5000	1000	500	6500	3250	4000	2000	5500	2750	3800	1900	1750	875	58450	29225
Sheep called Garar breeding females . .	1000	500	4700	2937½	600	225	500	187½	2000	750	1000	375	4500	1687½	4400	2200	27475	14187½
Swine total . . .	1500	1125	5000	1875	2000	1250	800	400	4000	2500	4000	2500	500	375	700	700	45900	26075
Asses	50	125	—	—	50	125	—	—	10	30	—	—	—	—	—	—	860	2377½
																	2162479	13595434

Estimate of the quantity of Milk procured by the owners of cattle in the District of Patna city and Zila Behar.

Division or Thanah.	Cows. Total number.	Cows. Number giving milk.	Cows. Average yearly produce of each cow in Sers.	Cows. Total milk in Mans & Sers. (Mans)	(Sers)	Cows. Price of the milk in Sers.	Cows. Total value of milk in Rupees and Anas. (Rupees)	(Anas)	Buffaloes. Total number.	Buffaloes. Number giving milk.	Buffaloes. Average yearly produce of each buffalo in Sers.	Buffaloes. Total milk in Mans & Sers. (Mans)	(Sers)	Buffaloes. Price of the milk in Sers.	Buffaloes. Total value of milk in Rupees and Anas. (Rupees)	(Anas)	Total. Total milk in Mans & Sers. (Mans)	(Sers)	Total. Total value of milk in Rupees and Anas. (Rupees)	(Anas)
Patna city .	2800	1400	200	7000	..	33	8484	13	1000	500	400	5000	..	33	6060	10	12000	..	14545	7
Phatuha . .	21745	10872	200	54360	..	45	48320	..	1400	700	400	7000	..	45	6222	3	61360	..	54542	3
Noubutpur .	6740	3370	150	12637	20	60	8425	..	500	250	430	2687	20	50	2150	..	15325	..	10575	..
Bakipur-Jaywar .	11100	5550	150	20812	..	40	20812	..	1000	500	400	5000	..	40	5000	..	25812	..	25812	..
Sherpur . .	3906	1953	150	73287	30	45	6514	..	200	100	280	700	..	45	622	3	73987	30	7136	3
	46291	23145	850	168097	10	..	92555	13	4100	2050	1910	20387	20	..	20055	..	188484	30	112610	13
Gaya . .	207653	103826	144	373773	24	47	318102	2	3000	1500	468	17550	..	45	15600	..	391323	24	333702	2
Nawada . .	190520	95260	115	273872	20	43	254765	..	2000	1000	346	8650	..	45	7688	14	282522	20	262453	14
Sheykhpurah .	96330	48165	126	251715	..	52	193646	3	3000	1500	300	11250	..	50	9000	..	262965	..	202646	3
Duriyapur .	28490	14245	145	51637	20	24	84347	12	2000	1000	285	7125	..	33	8636	6	58762	20	92984	2
Bar . .	30680	15340	270	103520	..	36	115022	3	1000	500	440	5500	..	36	6111	8	109020	..	121133	11
Behar . .	28040	14020	160	56080	..	50	44864	..	10000	5000	320	40000	..	40	40000	..	96080	..	84864	..
Helsa . .	48750	24375	195	117619	15	45	140550	3	200	100	420	1050	..	45	933	5	118669	15	141483	8
Holasgunj .	23630	11815	130	38398	..	45	34132	..	500	250	236	1475	..	32	1843	12	39873	..	35975	12
Jahanabad .	35810	17905	140	62667	..	45	55704	..	3000	1500	405	15187	20	32	18984	6	77854	20	74688	6
Daudnagar .	34890	17445	170	74141	..	40	74141	..	1200	600	255	3825	..	40	3825	..	77966	..	77966	..
Arwal . .	16100	8050	190	38237	..	35	43700	..	1000	500	250	3125	..	35	3600	..	41362	..	47300	..
Vikram . .	17650	8825	280	61775	..	50	49420	..	700	350	550	4812	20	50	3850	..	66587	20	53270	..
	758543	379271	2065	1503435	39	..	1408394	7	27600	13800	4275	119550	..	..	120073	3	1622985	39	1528467	10
Total .	804834	402416	2915	1671533	9	..	1500950	4	31700	15850	6185	139937	20	..	140128	3	1811470	29	1641078	7

Estimate of the proportion of rent paid in the district of Behar and city of Patna by the high casts, dealers, artificers, and ploughmen; and of the proportion of the ploughs held by their owners or men of their families, by those who cultivate for a share, or by hired servants or slaves, &c.

Proportions of Rent.	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Rent paid by high castes .	2-64	24-64	22-64	20-64	20-6	36-64	28-64	32-64	38-64	28-64	20-64	9-64	24-64	28-64	16-64	14-64	28-64
Rent paid by merchants or shopkeepers . .	22-64	2-64	4-64	1-64	4-64	1-64	4-64	1-64	few	3-64	1-64	1-128	4-64	4-64	2-64	1-64	4-64
Rent paid by artificers .	16-64	1-64		3-64		3-64		4-64	2-64		4-64	5-128			6-64	7-64	
Rent paid by ploughmen .	24-64	37-64	38-64	40-64	40-64	24-64	32-64	27-64	24-64	33-64	39-64	52-64	36-64	32-64	40-64	42-64	32-64
Ploughs held by persons who rent land and have stock	48-64	48-64	44-64	40-64	40-64	40-64	36-64	44-64	20-64	26-64	44-64	48-64	44-64	32-64	44-64	44-64	36-64
Ploughs held by persons who rent land but have no stock and are called Dhuriya .	..	..	..	..	..	..	..	..	4-64	4-64	..	..	..	..	..	..	..
Ploughs held by servants or slaves . . .	16-64	16-64	20-64	24-64	24-64	24-64	28-64	20-64	40-64	34-64	20-64	16-64	20-64	32-64	20-64	20-64	28-64
Proportion of rent farmed .	4-64	2-64	32-64	16-64	6-64	52-64	8-64	32-64	2-64	48-64	12-64	16-64	48-64	36-64	56-64	24-64	16-64
Proportion of rent collected by stewards . .	60-64	62-64	32-64	48-64	58-64	12-64	56-64	32-64	62-64	16-64	52-64	48-64	16-64	28-64	8-64	40-64	48-64
Proportion of rent paid in money . . .	whole	56-64	24-64	8-64	24-64	4-64	8-64	8-64	36-64	32-64	48-64	16-64	16-64	8-64	16-64	4-64	4-64
Proportion of rent arising from a division of crops .	few	8-64	40-64	56-64	40-64	60-64	56-64	56-64	28-64	32-64	16-64	48-64	48-64	56-64	48-64	60-64	60-64

An estimate of the number of cattle allowed for each plough in the different divisions of the Behar district and in that of the city of Patna.

Ploughs how Worked.	Patna city.		Phatuha.		Noubutpur.		Bakipur-Jaywar.		Sherpur.		Gaya.	
	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	4-64	25	100	25	20-64	25	16-64	25	8-64	23	24-64	25
Ploughs wrought by 3 oxen	8-64	18¾	52-64	18¾	20-64	18¾	16-64	18¾	16-64	17¼	8-64	18¾
Ploughs wrought by 2 oxen	36-64	12½ }	12-64	12½	24-64	12½	32-64	12½	40-64	11½	32-64	12½
Garden ground	16-64	3 }										

Ploughs how Worked.	Nawada.		Sheykhpurah.		Duriyapur.		Bar.		Behar.		Helsa.	
	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	16-64	30	16-64	30	16-64	28	24-64	28	8-64	30	4-64	30
Ploughs wrought by 3 oxen	16-64	22½	16-64	22½	24-64	21	20-64	21	8-64	22½	6-64	22½
Ploughs wrought by 2 oxen	32-64	15	32-64	15	24-64	14	20-64	14	48-64	15	54-64	15
Garden ground												

Ploughs how Worked.	Holasgunj.		Jahanabad.		Daudnagar.		Arwal.		Vikram.	
	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.	No. of ploughs.	No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	12-64	30	8-64	25	20-64	30	16-64	30	16-64	30
Ploughs wrought by 3 oxen	12-64	22½	40-64	18¾	20-64	22½	8-64	22½	16-64	22½
Ploughs wrought by 2 oxen	40-64	15	16-64	12½	24-64	15	40-64	15	32-64	15
Garden ground										

An estimate of the farmers who pay their rent from their own stock; of those who borrow ready money for the purpose; of those who take advances for produce, but at the crop season are able to discharge their engagements; and of those who are yearly increasing their debts.

Classification of Farmers.	Division or Thanah.																	
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Farmers who pay their rent from their own stock . .	44-64	4-64	8-64	16-64	16-64	16-64	32-64	32-64	16-64	16-64	48-64	12-64	16-64	24-64	24-64	4-64	4-64	21-64
Farmers who borrow ready money to pay their rent . .	20-64	20-64	48-64	24-64	40-64	32-64	32-64	8-64	24-64	24-64	12-64	24-64	16-64	28-64	24-64	60-64	56-64	27-64
Farmers who take advances on their crop to enable them to pay their rent . . .	—	40-64	8-64	24-64	8-64	16-64	—	24-64	24-64	24-64	4-64	—	8-64	12-64	16-64	few	4-64	12-64
Farmers who are annually increasing their debts . .	—	few	few	—	—	few	few	100	—	—	20	28-64	24-64	—	—	—	few	4-64
Farmers who take advances from their landlord to assist in cultivation	—	4-64	4-64	—	—	2-64	8-64	8-64	—	some	4-64	8-64	—	—	—	—	32-64	—

List of Artists in the city of Patna and district of Behar.

	Classification of Artists.		Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
			Division or Thanah.																	
1	Architects and statuaries	houses	..	..	..	..	..	10	..	..	..	..	..	..	30	..	..	..	..	40
2	Picture painters Musawir wallehs	do.	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
3	Nukkash inferior painters	do.	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
4	Mirasin or dancing girls who sing before Muhammedan ladies	sets	18	..	..	..	..	..	..	..	..	..	..	5	..	..	40	..	..	63
5	Bai	do.	30	..	1	1	..	12	3	2	..	3	1	3	2	6	10	2	1	77
6	Natuya	do.	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	5
7	Kalawangt and Dharhi	do.	40	3	..	2	3	..	..	4	..	1	20	..	..	..	6	..	..	79
8	Katthak	do.	9	..	..	..	..	16	20	..	..	..	..	..	3	..	10	..	..	58
9	Yajak	do.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
10	Bhajaniya	do.	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	3
11	Tasa-waleh		40	..	..	..	..	50	20	..	..	15	..	..	..	..	..	..	..	125
12	Pangchbajaniya	men	173	500	50	100	30	500	480	600	150	250	400	300	300	320	500	125	150	4928
13	Nahabat waleh		68	15	1	4	1	25	20	25	..	..	25	10	5	3	..	1	..	203
14	Roushun chauki		58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	59
15	Daphalis		40	50	5	15	..	25	10	15	2	3	25	10	5	15	50	7	10	287
16	Bokho		..	..	..	..	..	..	..	..	..	..	5	..	5	..	..	..	..	10
17	Pawangriya		5	..	..	6	2	1	5	5	..	..	2	10	1	..	25	4	4	70
18	Hijra		6	..	..	1	1	3	10	1	..	..	8	1	1	..	30	..	..	62
19	Washermen		400	125	30	160	40	180	300	125	100	100	150	250	80	150	200	60	100	2550
20	Shawl washermen		23	..	..	..	..	3	..	2	..	..	2	..	..	..	2	..	..	32
21	Soap maker		21	3	..	2	..	9	1	2	..	3	25	5	1	1	4	..	..	77
22	Wax candle maker		7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
23	Tallow candle maker		4	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	5
24	Torch and platter maker		54	..	..	8	..	70	..	..	..	..	5	..	..	..	25	..	..	162
25	Pagri or Dustarbund		12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
26	Taylors		258	20	10	100	5	100	50	36	16	25	50	15	25	50	100	10	30	900
27	Tentmakers		12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
28	Barbers		523	150	40	135	50	350	200	150	150	100	500	400	200	200	250	125	200	3723
29	Natin		..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	..	5
30	Abirgar		..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..	12
31	Redlead maker		..	..	..	..	..	..	2	..	..	..	..	..	..	20	..	..	..	22
32	Singriph maker		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

Continuation of the foregoing table.

33	Lahari or makers of Lack ornaments	34	..	5	10	8	30	15	30	19	30	50	25	40	10	30	4	3	343
34	Churisaz or glass bracelet makers	74	..	4	8	..	40	10	10	..	4	20	5	20	25	50	5	7	282
35	Tikisaz	126	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126
36	Minamurussa	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
37	Shishahgur	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
38	Malis or garland maker	138	20	..	50	5	50	30	50	5	20	200	50	25	50	50	55	15	813
39	Inkmakers	4	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	6
40	Umbrella makers	3	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	5
41	Thatchers	481	..	..	50	..	25	..	..	..	..	..	30	..	..	..	..	..	586
42	Domra	105	80	40	29	13	250	30	40	35	50	100	..	35	50	50	20	100	1027
43	Bangsphor	23	..	..	10	..	50	20	..	..	..	1	10	20	..	..	..	..	134
44	Petara makers	7	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	13
45	Morasaz	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	7
46	Paper maker	3	..	..	5	..	..	..	..	..	..	30	..	..	2	4	20	..	64
47	Mohurradar	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
48	Guddi maker	14	..	..	..	..	17	..	..	..	1	25	..	..	..	..	..	..	57
49	Atushbaz or preparer of fire works	29	3	..	1	2	12	5	5	1	2	20	5	2	10	15	1	5	118
50	Book binder	12	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	15
51	Chik who tan sheep and goat skins	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
52	Kimokhtsaz who prepare leather from ass and horse skins	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
53	Dabgar leathern bag or target maker	7	..	..	..	..	7	5	..	..	..	4	..	..	..	9	..	..	32
54	Chamar tanners and shoe makers	336	150	50	150	100	203	300	175	135	150	253	400	200	250	400	60	150	3462
55	Chikundoz make a kind of shoes called Chikun, black cloth embroidered with coloured silk	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
56	Zurdoz make the embroidered part of the fine shoes	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37
57	Kufsdoz join the embroidered part to the leather in fine shoes	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
58	Saddle makers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
59	Khugirdoz	4	1	..	..	..	3	2	..	..	..	..	..	..	..	..	..	..	10
60	Whip makers	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
61	Naychahbund	82	..	..	3	..	8	..	..	..	..	2	..	..	..	2	..	..	97
62	Nariyali hokka maker	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
63	Diyawal	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
64	Preparer of tobacco	71	..	..	35	..	50	15	5	5	25	25	..	..	5	17	..	..	253
65	Charcoal ball makers	92	..	..	3	..	..	..	..	..	5	..	1	5	3	5	..	..	114
66	Majun waleh	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
67	Distillers' shops	22	10	4	5	3	67	81	21	11	7	74	56	36	43	10	12	21	483
68	Number of men (Pasis) employed to collect Tari	428	..	..	380	..	..	..	200	38	200	..	1000	300	300	..	..	..	2846
69	Shops for retailing Tari	32	5	4	14	5	19	41	12	5	7	40	27	10	13	5	4	8	251
70	Distillers of rose water and essences	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
71	Chambeli flower oil maker	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	3
72	Oil makers or Teli { houses	770	300	70	337	100	1000	125	300	80	200	800	200	250	150	250	100	100	5132
	Oil makers or Teli { mills	881	300	70	350	100	1200	125	300	80	210	800	200	250	150	250	100	100	5466
73	Dahiyar Goyalas	930	..	50	165	200	100	300	250	300	100	500	400	200	100	300	250	200	4345
74	Makkhaniyas or butter makers	3	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	13

Continuation of the foregoing table.

75	Mayra or sweetmeat makers	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
76	Halwai sweetmeat makers	270	50	25	85	25	200	70	100	25	35	60	400	60	100	100	50	50	1705
77	Khanchahwala	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
78	Bharbhuna waleh	300	80	40	80	50	156	150	100	100	200	150	80	50	50	100	60	150	1896
79	Khasiyawala	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
80	Kuntilayi	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
81	Flour grinders	45	..	..	20	..	15	..	..	..	..	..	..	..	..	..	..	..	80
82	Daldara	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
83	Nanwais	51	..	..	9	..	2	..	..	..	..	10	1	..	..	3	..	..	76
84	Phaludawaleh	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
85	Bukurkussabs or butchers	172	12	1	15	4	25	..	20	3	3	100	5	2	25	20	4	..	411
86	Kussabs	64	5	5	11	6	12	5	..	..	..	50	50	8	..	50	1	4	271
87	Bawarchis or cooks	20	..	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..	40
88	Khundigur or workers in horn and ivory	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
89	Kangghaigur or hair comb maker	7	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	8
90	Turners	26	2	..	..	..	3	..	..	..	..	5	..	1	..	..	..	..	37
91	Khadimbund make the frames of looking glasses	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
92	House and palanquin painter	15	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	20
93	Sawers	84	2	2	15	..	10	..	..	..	..	..	..	..	..	2	..	2	117
94	Beldar or cleavers of wood	71	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	73
95	Barhai, those who make coarse wooden furniture and implements of agriculture	441	75	30	162	20	500	200	300	..	50	500	..	200	300	150	50	150	3128
96	Lohar and Barhai, who are both blacksmiths and carpenters	2	15	1	60	..	5	50	125	25	50	75	50	15	..	40	..	..	513
97	Lohar or blacksmiths	207	32	15	10	30	100	150	25	..	10	75	100	100	100	100	40	125	1219
98	Pinjrasaz or iron cage maker for birds	3	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	5
99	Nalbund or horse shoers	7	..	..	2	..	5	..	..	..	..	1	..	..	..	..	..	..	15
100	Sangur cutlers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
101	Sikulgur or armourers	30	2	..	5	..	4	5	3	2	3	25	3	5	..	20	..	2	109
102	Tirgur, who make arrows	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
103	Needle makers	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
104	Kasera	129	2	5	19	..	22	60	10	..	15	75	1	50	25	50	..	15	478
105	Thathera	48	12	10	..	..	40	..	30	1	5	125	29	40	..	10	2	50	402
106	Gurguri Khodwaiya	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
107	Bidri makers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
108	Inlayers and platers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
109	Mohurkund or seal engravers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
110	Rangdhaluya or tin ornament makers	45	7	5	..	..	1	..	..	..	..	8	10	20	..	5	..	..	101
111	Panni or tin leaf makers	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44
112	Kalaigur	17	..	..	..	..	3	..	..	..	..	3	..	..	..	2	..	..	25
113	Goldsmiths	583	35	20	135	40	300	70	50	40	100	205	100	75	120	300	50	70	2293
114	Sondhoya, who wash the sweepings of the Goldsmith's shop and the ashes of his fire	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35
115	Sonkari, who clean gold and silver	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
116	Jelahgur, who polish gold and silver	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

Continuation of the foregoing table.

117	Tarkush makers of coarse wire	24	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	25
118	Taniya or makers of fine wire	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
119	Chapriya wire flatteners	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	64
120	Tubukgur makers of gold and silver leaf	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
121	Mulumbasaz or gildar	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
122	Hukkah	16	..	..	..	..	1	10	..	..	..	1	..	..	..	..	..	..	28
123	Stone cutters	44	..	..	..	..	10	..	..	..	..	..	..	30	..	..	..	..	84
124	Potters	350	100	30	135	50	500	100	200	50	100	400	75	200	200	300	50	60	2900
125	Potters who make (Khelonas) toys	30	..	..	..	..	10	..	..	..	2	5	..	2	..	..	..	..	49
126	Pajaya	3	..	..	8	..	3	..	..	..	..	..	..	..	..	..	..	..	14
127	Brickmakers	47	..	..	120	..	25	..	..	..	..	..	..	..	..	..	..	..	192
128	Bricklayers	600	..	..	75	..	200	..	..	..	..	100	15	..	..	..	..	..	990
129	Lime burners	14	..	..	..	..	5	10	..	..	..	5	10	14	..	8	..	..	66
130	Dhuniya or cotton cleaners	278	100	25	70	60	100	100	125	50	45	200	100	50	70	400	50	50	1873
131	Spinners of cotton	23400	17622	8320	6238	3020	33885	9270	65265	9041	6059	35682	32775	7264	31710	16060	11220	13565	330396
132	Dyers or Rungrez	156	15	4	35	4	40	15	12	8	20	25	50	15	25	100	8	20	552
133	Nilgur or dyers with indigo	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
134	Achfurosh or dyers of cotton thread with the morinda	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
135	Gulalsaz	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
136	Weavers who work in Tasar silk and Tasar mixed with cotton thread } houses	2	500	..	..	..	200	80	..	..	..	..	..	..	..	..	..	..	782
	} looms	2	1250	..	..	..	250	120	..	..	..	..	..	..	..	..	..	..	1622
137	Weavers of cotton cloth } houses	2010	350	310	490	215	2120	1000	1500	160	600	5400	1075	500	1010	2175	560	425	19900
	} looms	2692	750	350	550	250	2500	1500	1800	160	1000	6000	1200	700	1200	2500	700	500	24352
138	Kundikor who betle bleached cloth	10	..	..	..	..	..	..	..	..	..	14	..	..	..	..	..	..	24
139	Parchakush or andiya who smooth fine cloth with a needle	1	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..	31
140	Kangghaigur	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	5
141	Kangnikar who put gold and silver thread in fine cloth	..	..	..	..	..	..	..	..	..	..	50	..	..	..	..	..	..	50
142	Butabanwaiya women	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	95
143	Chhapayur or Bushmasaz who print gold and silver flowerings	15	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
144	Chintz makers	126	20	1	3	..	6	1	5	7	5	12	50	25	4	4	..	..	269
145	Newargur	10	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	13
146	Knitters of mittens	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2
147	Weavers of carpets	128	..	..	1	..	..	..	..	..	..	..	..	..	..	75	5	..	209
148	Blanket weavers	45	..	5	24	10	100	20	40	10	20	20	25	5	100	50	50	40	564
149	Tashbinan weavers of cloth, of gold or silver	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
150	Gotasaz who weave gold and silver lace	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
151	Batwaiya or Kalabatu makers of gold lace strings	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
152	Alukbund who make ornamental knots for daggers	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
153	Patwars	137	6	2	23	3	15	..	13	5	10	10	5	30	5	60	5	16	345
154	Nakad who twist and wind silk thread	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
155	Kangjar who make ropes	5	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	7
156	Sugar boilers	..	..	..	..	..	..	..	..	..	..	15	20	1	..	..	..	..	36
157	Indigo factory	..	..	..	1	..	..	..	..	1	2	..	1	..	..	..	..	2	7
158	Furnaces for making nitre	1	9	4	..	..	10	50	2	40	100	200	100	..	50	..	..	..	566

Estimate explanatory of the manufacture of coarse cotton cloth in the district of Patna and Behar.

Division or Thanah.	Number of weavers.	Number of looms.	No. of pieces which one loom weaves in a month.	Kind of cloth.	Size of the pieces.	Number of threads in the warp.	Value of one piece.	Thread required for warp in 1 piece in Sicca weight.	Cost of the warp.	Thread required for woof in S. W.	Cost of the woof.	Total thread in Sicca weight.	Total value of thread required for one piece.	Starch and soap.	Profit by one piece.	Total profit in a month for each loom.	Value of all the thread which is used by the weavers.	Total value of cloth made annually.
					cubits.		R. A.		R. A.		R. A.		R. A.	R. A.	R. A.	R. A.	R. A.	R. A.
Patna city	1810	1892	4	Gajji	30 by 1¾	500	1 8	40	—	50	—	90	0 13	—	0 11	2 12	68284	179424
		600	4	Pagri	—	—	1 8	19	—	19	—	38	0 14	—	0 10	2 8		
Noubutpur	310	350	6½	Gajji	36½ by 1	400	0 15½	—	—	—	—	110	0 11	—	0 4½	1 13¾	18768	26447
Bakipur-Jaywar	490	550	4	Gajji	30 by 1¾	—	1 8	—	—	—	—	90	0 13	—	0 11	2 12	21400	39600
Sherpur	215	250	5½	Gajji	55 by 1½	—	1 8	72	—	72	—	144	1 2	—	0 6	2 1	18562½	24750
Gaya	2120	2500	4	Solegaji setara	36 by 2	—	2 4	114	0 13¾	144	1 0	258	1 13¾	—	0 6¼	1 9	203125	270000
Nawada	1000	1500	3½	Gajji	32 by 2	550	1 8	—	—	—	—	120	1 0	—	0 8	1 12	63000	94500
Sheykhpurah	1650	1950	5	Atharegaji	40 by 2	800	2 8	70	1 0	56	0 12	126	1 12	—	0 12	3 12	203805	292500
Duriyapur	160	160	5½	Sari	16 by 2	700	0 15	—	—	—	—	84	0 11	—	0 5	1 11½	7260	9900
Bar	600	1000	3	Gara	27 by 2	1200	3 0	—	—	—	—	130	2 4	—	0 12	2 4	81000	108000
Behar	5400	6000	5	Tangjeb	36½ by 2	800	2 0	55	0 14	40	0 12	95	1 10	—	0 6	1 14	585000	720000
Helsa	1075	1200	3	Khasa	36½ by 1¾	—	2 0	108	—	94½	—	202½	1 6	—	0 10	1 14	52525	86400
Holasgunj	590	700	6	Gajji	36½ by 1	—	0 14	—	—	—	—	104	0 9	—	0 5	1 14	28575	44100
Jahanabad	1010	1200	3	Solegaji	36½ by 2	850	3 0	104	1 4	117	1 2	221	2 6	0 1½	0 9½	1 12½	102600	129600
Daudnagar	2175	2500	4	Charkhana	32 by 1¾	—	2 8	45	0 12	45	0 14	90	1 10	—	0 9½	2 6	228750	300000
								Coarse thread				22½	0 4½					
Arwal	560	700	4	Pata	30 by 1½	550 to 600	1 8	—	—	—	—	88	1 0	—	0 8	2 0	33600	50400
Vikram	425	500	7	Gajji	45¾ by 1½	500	1 8	—	—	—	—	154	1 5	—	0 3	1 5	55125	63000
																	1771379½	2438621

Estimate of the proportion of rent paid in the district of Behar and city of Patna by the high casts, dealers, artificers, and ploughmen; and of the proportion of the ploughs held by their owners or men of their families, by those who cultivate for a share, or by hired servants or slaves, &c.

Proportions of Rent.	Division or Thanah.																
	Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.
Rent paid by high castes .	2-64	24-64	22-64	20-64	20-6	36-64	28-64	32-64	38-64	28-64	20-64	9-64	24-64	28-64	16-64	14-64	28-64
Rent paid by merchants or shopkeepers .	22-64	2-64	4-64	1-64	4-64	1-64	4-64	1-64	few	3-64	1-64	1-128	4-64	4-64	2-64	1-64	4-64
Rent paid by artificers .	16-64	1-64		3-64		3-64		4-64	2-64		4-64	5-128			6-64	7-64	
Rent paid by ploughmen .	24-64	37-64	38-64	40-64	40-64	24-64	32-64	27-64	24-64	33-64	39-64	52-64	36-64	32-64	40-64	42-64	32-64
Ploughs held by persons who rent land and have stock	48-64	48-64	44-64	40-64	40-64	40-64	36-64	44-64	20-64	26-64	44-64	48-64	44-64	32-64	44-64	44-64	36-64
Ploughs held by persons who rent land but have no stock and are called Dhuriya .	..	..	..	..	..	..	..	..	4-64	4-64	..	..	..	..	..	..	..
Ploughs held by servants or slaves . . .	16-64	16-64	20-64	24-64	24-64	24-64	28-64	20-64	40-64	34-64	20-64	16-64	20-64	32-64	20-64	20-64	28-64
Proportion of rent farmed .	4-64	2-64	32-64	16-64	6-64	52-64	8-64	32-64	2-64	48-64	12-64	16-64	48-64	36-64	56-64	24-64	16-64
Proportion of rent collected by stewards . .	60-64	62-64	32-64	48-64	58-64	12-64	56-64	32-64	62-64	16-64	52-64	48-64	16-64	28-64	8-64	40-64	48-64
Proportion of rent paid in money . . .	whole	56-64	24-64	8-64	24-64	4-64	8-64	8-64	36-64	32-64	48-64	16-64	16-64	8-64	16-64	4-64	4-64
Proportion of rent arising from a division of crops .	few	8-64	40-64	56-64	40-64	60-64	56-64	56-64	28-64	32-64	16-64	48-64	48-64	56-64	48-64	60-64	60-64

An estimate of the number of cattle allowed for each plough in the different divisions of the Behar district and in that of the city of Patna.

Ploughs how Worked.	Patna city. No. of ploughs.	Patna city. No. of bigahs cultivated by one plough.	Phatuha. No. of ploughs.	Phatuha. No. of bigahs cultivated by one plough.	Noubutpur. No. of ploughs.	Noubutpur. No. of bigahs cultivated by one plough.	Bakipur-Jaywar. No. of ploughs.	Bakipur-Jaywar. No. of bigahs cultivated by one plough.	Sherpur. No. of ploughs.	Sherpur. No. of bigahs cultivated by one plough.	Gaya. No. of ploughs.	Gaya. No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	4–64	25	100	25	20–64	25	16–64	25	8–64	23	24–64	25
Ploughs wrought by 3 oxen	8–64	18¾	52–64	18¾	20–64	18¾	16–64	18¾	16–64	17¼	8–64	18¾
Ploughs wrought by 2 oxen	36–64	12½ }	12–64	12½	24–64	12½	32–64	12½	40–64	11½	32–64	12½
Garden ground	16–64	3 }										

Ploughs how Worked.	Nawada. No. of ploughs.	Nawada. No. of bigahs cultivated by one plough.	Sheykhpurah. No. of ploughs.	Sheykhpurah. No. of bigahs cultivated by one plough.	Duriyapur. No. of ploughs.	Duriyapur. No. of bigahs cultivated by one plough.	Bar. No. of ploughs.	Bar. No. of bigahs cultivated by one plough.	Behar. No. of ploughs.	Behar. No. of bigahs cultivated by one plough.	Helsa. No. of ploughs.	Helsa. No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	16–64	30	16–64	30	16–64	28	24–64	28	8–64	30	4–64	30
Ploughs wrought by 3 oxen	16–64	22½	16–64	22½	24–64	21	20–64	21	8–64	22½	6–64	22½
Ploughs wrought by 2 oxen Garden ground	32–64	15	32–64	15	24–64	14	20–64	14	48–64	15	54–64	15

Ploughs how Worked.	Holasgunj. No. of ploughs.	Holasgunj. No. of bigahs cultivated by one plough.	Jahanabad. No. of ploughs.	Jahanabad. No. of bigahs cultivated by one plough.	Daudnagar. No. of ploughs.	Daudnagar. No. of bigahs cultivated by one plough.	Arwal. No. of ploughs.	Arwal. No. of bigahs cultivated by one plough.	Vikram. No. of ploughs.	Vikram. No. of bigahs cultivated by one plough.
Ploughs wrought by 4 oxen	12–64	30	8–64	25	20–64	30	16–64	30	16–64	30
Ploughs wrought by 3 oxen	12–64	22½	40–64	18¾	20–64	22½	8–64	22½	16–64	22½
Ploughs wrought by 2 oxen Garden ground	40–64	15	16–64	12½	24–64	15	40–64	15	32–64	15

An estimate of the farmers who pay their rent from their own stock; of those who borrow ready money for the purpose; of those who take advances for produce, but at the crop season are able to discharge their engagements; and of those who are yearly increasing their debts.

Classification of Farmers.	Division or Thanah.																	
	Patna city.	Phatuha.	Noubutpur.	Bakipur–Jaywar.	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
Farmers who pay their rent from their own stock . .	44-64	4-64	8-64	16-64	16-64	16-64	32-64	32-64	16-64	16-64	48-64	12-64	16-64	24-64	24-64	4-64	4-64	21-64
Farmers who borrow ready money to pay their rent . .	20-64	20-64	48-64	24-64	40-64	32-64	32-64	8-64	24-64	24-64	12-64	24-64	16-64	28-64	24-64	60-64	56-64	27-64
Farmers who take advances on their crop to enable them to pay their rent . . .	—	40-64	8-64	24-64	8-64	16-64	—	24-64	24-64	24-64	4-64	—	8-64	12-64	16-64	few	4-64	12-64
Farmers who are annually increasing their debts . .	—	few	few	—	—	few	few	100	—	—	20	28-64	24-64	—	—	—	few	4-64
Farmers who take advances from their landlord to assist in cultivation	—	4-64	4-64	—	—	2-64	8-64	8-64	—	some	4-64	8-64	—	—	—	—	32-64	—

List of Artists in the city of Patna and district of Behar.

	Classification of Artists.		Patna city.	Phatuha.	Noubutpur.	Bakipur-Jaywar	Sherpur.	Gaya.	Nawada.	Sheykhpurah.	Duriyapur.	Bar.	Behar.	Helsa.	Holasgunj.	Jahanabad.	Daudnagar.	Arwal.	Vikram.	Total.
			Division or Thanah.																	
1	Architects and statuaries	houses	..	..	..	..	..	10	..	..	..	..	..	..	30	..	..	..	..	40
2	Picture painters Musawir wallehs	do.	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
3	Nukkash inferior painters	do.	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
4	Mirasin or dancing girls who sing before Muhamedan ladies	sets	18	..	..	..	..	..	..	..	..	..	..	5	..	..	40	..	..	63
5	Bai	do.	30	..	1	1	..	12	3	2	..	3	1	3	2	6	10	2	1	77
6	Natuya	do.	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	5
7	Kalawangt and Dharhi	do.	40	3	..	2	3	..	..	4	..	1	20	..	..	..	6	..	..	79
8	Katthak	do.	9	..	..	..	..	16	20	..	..	..	..	..	3	..	10	..	..	58
9	Yajak	do.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
10	Bhajaniya	do.	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	3
11	Tasa-waleh		40	..	..	..	..	50	20	..	..	15	..	..	..	..	..	..	..	125
12	Pangchbajaniya	men	173	500	50	100	30	500	480	600	150	250	400	300	300	320	500	125	150	4928
13	Nahabat waleh		68	15	1	4	1	25	20	25	..	..	25	10	5	3	..	1	..	203
14	Roushun chauki		58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	59
15	Daphalis		40	50	5	15	..	25	10	15	2	3	25	10	5	15	50	7	10	287
16	Bokho		..	..	..	..	..	..	..	..	..	..	5	..	5	..	..	..	..	10
17	Pawangriya		5	..	..	6	2	1	5	5	..	..	2	10	1	..	25	4	4	70
18	Hijra		6	..	..	1	1	3	10	1	..	..	8	1	1	..	30	..	..	62
19	Washermen		400	125	30	160	40	180	300	125	100	100	150	250	80	150	200	60	100	2550
20	Shawl washermen		23	..	..	..	..	3	..	2	..	..	2	..	..	..	2	..	..	32
21	Soap maker		21	3	..	2	..	9	1	2	..	3	25	5	1	1	4	..	..	77
22	Wax candle maker		7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
23	Tallow candle maker		4	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	5
24	Torch and platter maker		54	..	..	8	..	70	..	..	..	..	5	..	..	..	25	..	..	162
25	Pagri or Dustarbund		12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
26	Taylors		258	20	10	100	5	100	50	36	16	25	50	15	25	50	100	10	30	900
27	Tentmakers		12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
28	Barbers		523	150	40	135	50	350	200	150	150	100	500	400	200	200	250	125	200	3723
29	Natin		..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	..	5
30	Abirgar		..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..	12
31	Redlead maker		..	..	..	..	..	..	2	..	..	..	..	..	..	20	..	..	..	22
32	Singriph maker		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

Continuation of the foregoing table.

33	Lahari or makers of Lack ornaments	34	..	5	10	8	30	15	30	19	30	50	25	40	10	30	4	3	343
34	Churisaz or glass bracelet makers	74	..	4	8	..	40	10	10	..	4	20	5	20	25	50	5	7	282
35	Tikisaz	126	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126
36	Minamurussa	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
37	Shishahgur	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
38	Malis or garland maker	138	20	..	50	5	50	30	50	5	20	200	50	25	50	50	55	15	813
39	Inkmakers	4	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	6
40	Umbrella makers	3	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	5
41	Thatchers	481	..	..	50	..	25	..	..	..	..	..	30	..	..	..	..	..	586
42	Domra	105	80	40	29	13	250	30	40	35	50	100	..	35	50	50	20	100	1027
43	Bangsphor	23	..	..	10	..	50	20	..	..	..	1	10	20	..	..	..	..	134
44	Petara makers	7	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	13
45	Morasaz	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	7
46	Paper maker	3	..	..	5	..	..	..	..	..	..	30	..	..	2	4	20	..	64
47	Mohurradar	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
48	Guddi maker	14	..	..	..	..	17	..	..	..	1	25	..	..	..	..	..	..	57
49	Atushbaz or preparer of fire works	29	3	..	1	2	12	5	5	1	2	20	5	2	10	15	1	5	118
50	Book binder	12	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	15
51	Chik who tan sheep and goat skins	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
52	Kimokhtsaz who prepare leather from ass and horse skins	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
53	Dabgar leathern bag or target maker	7	..	..	..	..	7	5	..	..	..	4	..	..	..	9	..	..	32
54	Chamar tanners and shoe makers	336	150	50	150	100	203	300	175	135	150	253	400	200	250	400	60	150	3462
55	Chikundoz make a kind of shoes called Chikun, black cloth embroidered with coloured silk	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
56	Zurdoz make the embroidered part of the fine shoes	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37
57	Kufsdoz join the embroidered part to the leather in fine shoes	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
58	Saddle makers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
59	Khugirdoz	4	1	..	..	..	3	2	..	..	..	..	..	..	..	..	..	..	10
60	Whip makers	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
61	Naychahbund	82	..	..	3	..	8	..	..	..	..	2	..	..	..	2	..	..	97
62	Nariyali hokka maker	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
63	Diyawal	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
64	Preparer of tobacco	71	..	..	35	..	50	15	5	5	25	25	..	..	5	17	..	..	253
65	Charcoal ball makers	92	..	..	3	..	..	..	..	..	5	..	1	5	3	5	..	..	114
66	Majun waleh	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
67	Distillers' shops	22	10	4	5	3	67	81	21	11	7	74	56	36	43	10	12	21	483
68	Number of men (Pasis) employed to collect Tari	428	..	..	380	..	..	..	200	38	200	..	1000	300	300	..	..	..	2846
69	Shops for retailing Tari	32	5	4	14	5	19	41	12	5	7	40	27	10	13	5	4	8	251
70	Distillers of rose water and essences	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
71	Chambeli flower oil maker	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	3
72	Oil makers or Teli { houses	770	300	70	337	100	1000	125	300	80	200	800	200	250	150	250	100	100	5132
	{ mills	881	300	70	350	100	1200	125	300	80	210	800	200	250	150	250	100	100	5466
73	Dahiyar Goyalas	930	..	50	165	200	100	300	250	300	100	500	400	200	100	300	250	200	4345
74	Makkhaniyas or butter makers	3	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	13

Continuation of the foregoing table.

75	Mayra or sweetmeat makers	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
76	Halwai sweetmeat makers	270	50	25	85	25	200	70	100	25	35	60	400	60	100	100	50	50	1705
77	Khanchahwala	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
78	Bharbhuna waleh	300	80	40	80	50	156	150	100	100	200	150	80	50	50	100	60	150	1896
79	Khasiyawala	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
80	Kuntilayi	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
81	Flour grinders	45	..	..	20	..	15	..	..	..	..	..	..	..	..	..	..	..	80
82	Daldara	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
83	Nanwais	51	..	..	9	..	2	..	..	..	..	10	1	..	..	3	..	..	76
84	Phaludawaleh	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
85	Bukurkussabs or butchers	172	12	1	15	4	25	..	20	3	3	100	5	2	25	20	4	..	411
86	Kussabs	64	5	5	11	6	12	5	..	..	..	50	50	8	..	50	1	4	271
87	Bawarchis or cooks	20	..	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..	40
88	Khundigur or workers in horn and ivory	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
89	Kangghaigur or hair comb maker	7	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	8
90	Turners	26	2	..	..	..	3	..	..	..	..	5	..	1	..	..	..	..	37
91	Khadimbund make the frames of looking glasses	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
92	House and palanquin painter	15	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	20
93	Sawers	84	2	2	15	..	10	..	..	..	..	..	..	..	..	2	..	2	117
94	Beldar or cleavers of wood	71	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	73
95	Barhai, those who make coarse wooden furniture and implements of agriculture	441	75	30	162	20	500	200	300	..	50	500	..	200	300	150	50	150	3128
96	Lohar and Barhai, who are both blacksmiths and carpenters	2	15	1	60	..	5	50	125	25	50	75	50	15	..	40	..	..	513
97	Lohar or blacksmiths	207	32	15	10	30	100	150	25	..	10	75	100	100	100	100	40	125	1219
98	Pinjrasaz or iron cage maker for birds	3	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	5
99	Nalbund or horse shoers	7	..	..	2	..	5	..	..	..	..	1	..	..	..	..	..	..	15
100	Sangur cutlers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
101	Sikulgur or armourers	30	2	..	5	..	4	5	3	2	3	25	3	5	..	20	..	2	109
102	Tirgur, who make arrows	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
103	Needle makers	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
104	Kasera	129	2	5	19	..	22	60	10	..	15	75	1	50	25	50	..	15	478
105	Thathera	48	12	10	..	..	40	..	30	1	5	125	29	40	..	10	2	50	402
106	Gurguri Khodwaiya	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
107	Bidri makers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
108	Inlayers and platers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
109	Mohurkund or seal engravers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
110	Rangdhaluya or tin ornament makers	45	7	5	..	..	1	..	..	..	..	8	10	20	..	5	..	..	101
111	Panni or tin leaf makers	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44
112	Kalaigur	17	..	..	..	..	3	..	..	..	..	3	..	..	..	2	..	..	25
113	Goldsmiths	583	35	20	135	40	300	70	50	40	100	205	100	75	120	300	50	70	2293
114	Sondhoya, who wash the sweepings of the Goldsmith's shop and the ashes of his fire	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35
115	Sonkari, who clean gold and silver	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
116	Jelahgur, who polish gold and silver	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

Continuation of the foregoing table.

117	Tarkush makers of coarse wire	24	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	25
118	Taniya or makers of fine wire	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
119	Chapriya wire flatteners	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	64
120	Tubukgur makers of gold and silver leaf	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
121	Mulumbasaz or gildar	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
122	Hukkah	16	..	..	..	..	1	10	..	..	..	1	..	..	..	..	..	..	28
123	Stone cutters	44	..	..	..	..	10	..	..	..	..	..	..	30	..	..	..	..	84
124	Potters	350	100	30	135	50	500	100	200	50	100	400	75	200	200	300	50	60	2900
125	Potters who make (Khelonas) toys	30	..	..	..	..	10	..	..	..	2	5	..	2	..	..	..	..	49
126	Pajaya	3	..	..	8	..	3	..	..	..	..	..	..	..	..	..	..	..	14
127	Brickmakers	47	..	..	120	..	25	..	..	..	..	..	..	..	..	..	..	..	192
128	Bricklayers	600	..	..	75	..	200	..	..	..	..	100	15	..	..	..	..	..	990
129	Lime burners	14	..	..	..	..	5	10	..	..	..	5	10	14	..	8	..	..	66
130	Dhuniya or cotton cleaners	278	100	25	70	60	100	100	125	50	45	200	100	50	70	400	50	50	1873
131	Spinners of cotton	23400	17622	8320	6238	3020	33885	9270	65265	9041	6059	35682	32775	7264	31710	16060	11220	13565	330396
132	Dyers or Rungrez	156	15	4	35	4	40	15	12	8	20	25	50	15	25	100	8	20	552
133	Nilgur or dyers with indigo	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
134	Achfurosh or dyers of cotton thread with the morinda	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
135	Gulalsaz	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
136	Weavers who work in Tasar silk and Tasar mixed with cotton thread } houses	2	500	..	..	..	200	80	..	..	..	..	..	..	..	..	..	..	782
	} looms	2	1250	..	..	..	250	120	..	..	..	..	..	..	..	..	..	..	1622
137	Weavers of cotton cloth } houses	2010	350	310	490	215	2120	1000	1500	160	600	5400	1075	500	1010	2175	560	425	19900
	} looms	2692	750	350	550	250	2500	1500	1800	160	1000	6000	1200	700	1200	2500	700	500	24352
138	Kundikor who betle bleached cloth	10	..	..	..	..	..	..	..	..	..	14	..	..	..	..	..	..	24
139	Parchakush or andiya who smooth fine cloth with a needle	1	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..	31
140	Kangghaigur	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	5
141	Kangnikar who put gold and silver thread in fine cloth	..	..	..	..	..	..	..	..	..	..	50	..	..	..	..	..	..	50
142	Butabanwaiya women	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	95
143	Chhapayur or Bushmasaz who print gold and silver flowerings	15	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
144	Chintz makers	126	20	1	3	..	6	1	5	7	5	12	50	25	4	4	..	..	269
145	Newargur	10	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	13
146	Knitters of mittens	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2
147	Weavers of carpets	128	..	..	1	..	..	..	..	..	..	..	..	..	..	75	5	..	209
148	Blanket weavers	45	..	5	24	10	100	20	40	10	20	20	25	5	100	50	50	40	564
149	Tashbinan weavers of cloth, of gold or silver	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
150	Gotasaz who weave gold and silver lace	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
151	Batwaiya or Kalabatu makers of gold lace strings	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
152	Alukbund who make ornamental knots for daggers	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
153	Patwars	137	6	2	23	3	15	..	13	5	10	10	5	30	5	60	5	16	345
154	Nakad who twist and wind silk thread	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
155	Kangjar who make ropes	5	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	7
156	Sugar boilers	..	..	..	..	..	..	..	..	..	..	15	20	1	..	..	..	..	36
157	Indigo factory	..	..	..	1	..	..	..	..	1	2	..	1	..	..	..	.	2	7
158	Furnaces for making nitre	1	9	4	..	..	10	50	2	40	100	200	100	..	50	..	..	..	566

Estimate explanatory of the manufacture of coarse cotton cloth in the district of Patna and Behar.

Division or Thanah.	Number of weavers.	Number of looms.	No. of pieces which one loom weaves in a month.	Kind of cloth.	Size of the pieces.	Number of threads in the warp.	Value of one piece.	Thread required for warp in 1 piece in Sicca weight.	Cost of the warp.	Thread required for woof in S. W.	Cost of the woof.	Total thread in Sicca weight.	Total value of thread required for one piece.	Starch and soap.	Profit by one piece.	Total profit in a month for each loom.	Value of all the thread which is used by the weavers.	Total value of cloth made annually.
					cubits.		R. A.		R. A.		R. A.		R. A.	R. A.	R. A.	R. A.	R. A.	R. A.
Patna city	1810	1892	4	Gajji	30 by 1¾	500	1 8	40	—	50	—	90	0 13	—	0 11	2 12	68284	179424
		600	4	Pagri	—	—	1 8	19	—	19	—	38	0 14	—	0 10	2 8		
Noubutpur	310	350	6½	Gajji	36½ by 1	400	0 15½	—	—	—	—	110	0 11	—	0 4½	1 13¾	18768	26447
Bakipur-Jaywar	490	550	4	Gajji	30 by 1¾	—	1 8	—	—	—	—	90	0 13	—	0 11	2 12	21400	39600
Sherpur	215	250	5½	Gajji	55 by 1½	—	1 8	72	—	72	—	144	1 2	—	0 6	2 1	18562½	24750
Gaya	2120	2500	4	Solegaji setara	36 by 2	—	2 4	114	0 13¾	144	1 0	258	1 13¾	—	0 6¼	1 9	203125	270000
Nawada	1000	1500	3½	Gajji	32 by 2	550	1 8	—	—	—	—	120	1 0	—	0 8	1 12	63000	94500
Sheykhpurah	1650	1950	5	Atharegaji	40 by 2	800	2 8	70	1 0	56	0 12	126	1 12	—	0 12	3 12	203805	292500
Duriyapur	160	160	5½	Sari	16 by 2	700	0 15	—	—	—	—	84	0 11	—	0 5	1 11½	7260	9900
Bar	600	1000	3	Gara	27 by 2	1200	3 0	—	—	—	—	130	2 4	—	0 12	2 4	81000	108000
Behar	5400	6000	5	Tangjeb	36½ by 2	800	2 0	55	0 14	40	0 12	95	1 10	—	0 6	1 14	585000	720000
Helsa	1075	1200	3	Khasa	36½ by 1¾	—	2 0	108	—	94½	—	202½	1 6	—	0 10	1 14	52525	86400
Holasgunj	590	700	6	Gajji	36½ by 1	—	0 14	—	—	—	—	104	0 9	—	0 5	1 14	28575	44100
Jahanabad	1010	1200	3	Solegaji	36½ by 2	850	3 0	104	1 4	117	1 2	221	2 6	0 1½	0 9½	1 12½	102600	129600
Daudnagar	2175	2500	4	Charkhana	32 by 1¾	—	2 8	45	0 12	45	0 14	90	1 10	—	0 9½	2 6	228750	300000
										Coarse thread		22½	0 4½					
Arwal	560	700	4	Pata	30 by 1½	550 to 600	1 8	—	—	—	—	88	1 0	—	0 8	2 0	33600	50400
Vikram	425	500	7	Gajji	45¾ by 1½	500	1 8	—	—	—	—	154	1 5	—	0 3	1 5	55125	63000
																	1771379½	2438621

Estimate explanatory of the manufacture of finer cotton cloth in the Company's factories of Maghra, Jahanabad, and Bigha.

Factory.	Kind of cloth.	No. of pieces which 1 loom weaves in a month.	Size of the pieces.	Number of threads in the warp.	Value of a piece.	Thread required for warp in one piece in Sicca weight.	Cost of the warp.	Thread required for woof in S. W.	Cost of the woof.	Total thread in S. W.	Total value of thread required to one piece.	Starch and soap.	Total charges.	Profit by one piece.	Total profit in a month for each loom.
			cubits.		R. A.		R. A.		R. A.	R. A.	R. A.		R. A.	R. A.	R. A.
Arang Maghra.	Amriti naya rasi . .	2	36 by 1 10-16	1050	3 12	85	1 5	95	1 5½	180	2 10½	—	—	1 1½	2 3
	Amriti rasi . . .	3	27 by 1¾	1000	2 10	60	0 14¾	70	1 0	130	1 14¾	—	—	0 11¼	2 1¾
	Amriti rasi . . .	2	36 by 2	1125	4 0	110	1 7½	120	1 8	230	2 15½	—	—	1 0½	2 3
	Tangjeb	2	36 by 2	1300	5 4	65	2 3	45	1 13	110	4 0	—	—	1 4	2 8
	Malmal	2	36 by 2	1200	5 0	50	2 0	30	1 8	80	3 8	—	—	1 8	3 0
	Mahamudi maddham	3	27 by 1 10-16	1200	3 6	55	1 3½	65	1 5	120	2 8½	—	—	0 13½	2 8½
Arang Bigha.	Mehi mahamudi naya	—	27 by 2	2000	7 12	80	2 11¾	80	3 3	160	5 14¾	—	—	1 13¼	—
	Salgachhi	—	27 by 2	1750	5 8	90	2 0	100	2 0	190	4 0	—	—	1 8	—
	Mehi mahamudi . .	—	27 by 1 10-16	1500	4 8	80	1 9½	80	1 9½	160	3 3	—	—	1 5	—
	Amriti naya mehi .	—	36 by 1 10-16	1200	4 5	120	1 9½	130	1 7	250	3 0½	—	—	1 4½	—
	Bafta mehi . . .	—	36 by 1½	1200	4 6	110	1 9	120	1 8	230	3 1	—	—	1 5	—
	Mahamudi rasi . .	—	27 by 1 10-16	950	2 12	100	1 0¾	110	1 0¾	210	2 1½	—	—	0 10½	—
	Bafta chhita . . .	—	25 by 2	1150	3 4	100	1 5½	115	1 4½	215	2 10	—	—	0 10	—
												anas			
Arang Jahanabad.	Mahamudi naya mehi	1	40 by 2	1900	11 0	120	4 2	130	4 4¼	250	8 6¼	1¾	8 8	2 8	2 8
	Kanikos mehi . .	1	48 by 2	1600	9 12	200	3 14½	240	3 12	440	7 10½	1½	7 12	2 0	2 0
	Rasi Bafta	2	36 by 2	1100	4 2	170	1 9½	190	1 10	360	3 3½	1½	3 5	0 13	1 10
	Gara	2	36 by 2¼	1100	4 8	190	1 12½	210	1 10¼	400	3 6¾	1¼	3 8	1 0	2 0
	Amriti naya mehi .	2	36 by 1 10-16	1050	3 13	140	1 5	160	1 6	300	2 11	1	2 12	1 1	2 2
	Naya bafta . . .	3	27 by 2	1325	3 14	120	1 6½	140	1 7 12½	260	2 14 2½	1 2½	2 15¼	0 14	2 12¼
	Kanikos behar . .	1½	40 by 2	1425	6 6	180	2 4	220	2 6½	400	4 10¼	1½	4 12	1 10	2 7

Exports and Imports of the district of Patna City and Zila Behar.

Articles of Commerce.	Patna City.		Total of Patna City and all the other Districts.	
	Exports.	Imports.	Exports.	Imports.
	Rupees.	Rupees.	Rupees.	Rupees.
Rice in the husk	10000	182300	74500	184300
Rice cleaned by boiling	49000	305000	221900	307300
Rice cleaned without boiling	139100	34000	222900	38200
Kodo	—	2900	1500	3800
Maruya	—	42300	250	42900
Kauni	—	700	—	700
Wheat	183200	470000	207950	495700
Barley	18000	44000	24400	47600
Maize	25800	91800	28650	95850
Janera	22000	80700	26700	81400
Bajra	2900	500	2900	500
China	—	2000	—	2000
Sama	—	70	—	70
Jaokerao or mixture of barley and pease	8600	64800	17300	66500
But	65300	106000	93450	112100
Bhetmash	—	60	—	60
Arahar	38300	162600	54400	162600
Pease	24500	21800	38950	21800
Bhringgi	100	8300	100	8325
Mung	2100	4700	2100	4900
Urid or Mashkalai	1600	69700	1950	70780
Khesari	23900	47100	47450	47100
Masur	34100	42300	43100	42300
Kulthi	400	37200	1900	37200
Rape and mustard seed	800	77300	9100	78850
Seed of Sisamum or Til	—	23900	800	24400
Poppy seed	2600	58300	2725	58300
Linseed	2300	193900	8850	195100
Linseed and Mustard	—	125000	—	125000
Ricinus	—	9500	2250	10000
Oil	3200	120000	3700	124000
Ghiu or boiled butter	71600	184250	80480	207750
Milk	—	10000	—	10000
Salambi Salt	—	143750	—	150150
Coast salt or Karkach and Saphri	260000	337500	260000	356500
Bengal salt or Pangga	539100	1297000	552350	1394200
Sugar	94800	125000	101050	127800
Extract of Sugarcane	69700	64250	79915	71300
Treacle or Chhoya	—	3800	—	4450
Sukkur or coarse sugar	48000	26300	54000	26300
Bhura a kind of sugar	6600	16500	6600	165000
Honey	200	400	200	400
Betlenuts	25000	100250	25000	106525
Cocoanuts and shells	3250	16500	3250	17450
Tobacco	—	152900	—	235275
Hempbuds or Gangja	5000	20000	5000	20500
Indigo	—	14000	92000	14000
Opium	549258	294366	549258	294366
Mahuya flowers	—	41800	1000	53500

Continuation of the foregoing table.

Articles of Commerce.	Patna City.		Total of Patna City and all the other Districts.	
	Exports.	Imports.	Exports.	Imports.
	Rupees.	Rupees.	Rupees.	Rupees.
Turmeric	15600	31250	16500	43845
Ginger	900	5800	900	6300
Betle leaf	—	13000	1300	14525
Safflower	2000	3000	2000	3000
Jira seeds	1600	—	16200	40
Pasari goods	74600	163000	74610	170700
Wax and candles . .	27000	40800	30750	44550
Catechu or Kath . .	45000	55000	45000	55550
Glass rings	—	—	—	100
Lac	4000	4700	4000	10125
Gulal	7000	—	7000	—
Gold	—	10000	—	10000
Copper	36250	58400	36250	58400
Zinc or Justah . . .	52000	109250	52000	109250
Tin or Rangga . . .	24000	44800	24000	45000
Lead	37900	50500	37900	50500
Iron	10500	16900	16800	48975
European iron and Pholad .	100	800	100	800
Bindaloha or Murshedabad iron	—	750	—	750
Brass and bell metal vessels	10000	32000	17700	41425
Iron wares	—	1000	—	1000
Pata or hemp of Cochorus .	3000	9200	3000	12050
Sack cloth bags and ropes .	800	3500	800	4925
Kasmiri San or hemp of Crotolaria	900	4600	900	4670
Cotton wool	5000	130000	5000	133000
Cotton with the seed .	—	—	9550	—
Cotton thread	1500	2000	3400	33900
Cotton cloth	200000	25000	545000	38500
Diaper or Table cloth .	—	—	175000	—
Cocoons or Tasarguti .	—	—	—	60500
Banusa cloth Tasar and cotton mixed . .	—	—	124000	600
Pure silk cloth . . .	3500	10000	3500	10550
Raw silk	—	2000	—	2150
Maldehi masru and other cloth of silk and cotton mixed	12000	30000	12000	45800
Cotton and woollen sutrunjis	19000	2000	22000	2000
Chints	121500	15000	123500	15400
Kharuya cloth	2000	5000	2000	5000
Blankets	2000	500	7800	2850
Gold and silver thread or lace	15000	—	15000	650
Shals	4000	15000	4000	15500
Perfume and essences .	3100	5300	4000	5950
Leathern bags and Targets	—	1000	25	1000
Shoes	100000	—	100500	200
Manihari goods . . .	47200	61100	47200	61435

Continuation of the foregoing table.

Articles of Commerce.	Patna City.		Total of Patna City and all the other Districts.	
	Imports.	Exports.	Imports.	Exports.
	Rupees.	Rupees.	Rupees.	Rupees.
Papers	—	2850	1125	5550
Wooden furniture	3000	3000	3000	3025
Timber of Sakuya and Sisau, &c.	—	24350	—	34250
Small posts, beams, planks, and bamboos	500	16500	500	36050
Fire wood	—	80000	—	81700
Charcoal	—	5000	—	6000
Bamboo baskets	—	—	—	2050
Nal Sap and Kus mats	—	4000	—	4000
Rattans	—	500	—	1500
Reeds or Nal	—	900	—	900
Reeds and grass	—	400	—	6900
Sabe and Muj	—	5100	—	6790
Sal leaves for plates	—	100	—	100
Dhuna	1600	1900	1600	1900
Venison and game	—	—	—	400
Fishes	—	7000	—	8500
Swine	—	500	—	800
Sheep and Goats	—	5000	650	6500
Buffaloes	—	—	—	500
Oxen and cows	—	600	—	40700
Leather of oxen and buffaloes	—	—	—	3000
Lime	—	32000	—	32900
Stone wares	—	2000	4000	2450
Soda Sajji and Rehe matti	2500	6750	2500	8800
Khari salt	3650	5700	3650	5700
Fowls	—	—	—	1500
Singing birds	—	200	—	200
Red lead	3800	11200	3800	20825
Vegetables for eating	3000	3200	3250	3200
Saltpetre	—	—	12600	—
Fresh fruit	1700	8200	1700	10500
Hot seasonings	4550	8850	4550	8850
Dried fruits	500	5200	500	5200
Ivory	—	500	—	500
Broad cloth	8000	12000	8000	12000
Tush	2500	4000	2500	4000
Chaungri and Musk	5000	10000	5000	10000
Total	3259558	6510546	4599988	7145806

GENERAL STATISTICAL TABLE OF THE DISTRICT OF SHAHABAD.

Number.	Division or Thanah.	Extent in square miles.	Soil and situation. On the level part of the district. Rivers, tanks, marshes, water-courses.	Liable annually to be under water. Clay.	Liable annually to be under water. Good free soil.	Liable annually to be under water. Light sandy soil.	Exempt from regular floods. Clay land.	Exempt from regular floods. Free soil.	Exempt from regular floods. Sandy or gravelly light.	Exempt from regular floods. Level rocks, stones, and barren lands.	Hills and table land. Rocks or too steep for the plough.	Hills and table land. Capable of being ploughed.	Manner of occupation. Altogether unfit for the plough or waste. Rivers, &c.	Hills and table land.	Level land. Inundated of a good soil. Clear or deserted.	Inundated of a good soil. Reeds, bushes & trees.	Exempt from floods and of good soil. Woods, bushes, and deserted villages.	Exempt from floods and of good soil. Reeds, pasture or deserted fields.	Broken corners, burial grounds, roads, markets, and barren lands.	Fit for the plough but allowed a fallow, all on the level.	Actually occupied by farmers who hold the plough. On the level. Clay. Inundated.	Clay. High.	Free. Inundated.	Free. High.	On the table land.	People. Number of people.	Proportion between number of Moslems.	Proportion between number of Hindus.	State of education. Adhyapaks or Pandits.	Moulavis.	Miyajis or Khulifahs.	Gurus.	Commerce. Market places.	Exports.	Imports.
																																		Rupees.	Rupees.
1	Arah .	343	30	52	155	–	35	59	12	–	–	–	30	–	–	–	–	4	20	–	50	34	149	56	–	201360	1[illegible]	14[illegible]	5	3	30	200	21	97999	78384
2	Biloti .	297	23	18	116	6	100	33	1	–	–	–	23	–	–	2	34	30	7	–	17	67	117	–	–	134500	1[illegible]	14[illegible]	1	–	10	7	14	317064	73475
3	Dumraong	439	20	20	32	3	321	28	15	–	–	–	20	–	–	–	110	14	17	–	19	199	33	27	–	167000	[illegible]	15[illegible]	8	–	10	50	20	99515	20127
4	Ekwari .	380	12	–	–	–	147	148	73	–	–	–	12	–	–	–	54	42	12	24	–	94	–	142	–	149400	1[illegible]	14[illegible]	–	–	10	10	13	83216	43621
5	Karangja .	392	8	–	–	–	152	173	59	–	–	–	8	–	–	–	35	108	18	13	–	106	–	105	–	124300	[illegible]	15[illegible]	1	–	10	25	18	16719	28404
6	Baraong .	356	6	–	–	–	127	140	73	–	1	–	6	1	–	–	5	67	15	10	–	105	–	147	–	144490	[illegible]	15[illegible]	1	–	2	10	12	46440	46460
7	Shahasram	379	6	–	–	–	138	42	30	7	106	60	6	164	–	–	8	15	27	–	–	108	–	49	2	128230	1	15	3	–	2	7	19	35683	22441
8	Tilothu .	560	25	–	–	–	–	34	110	10	191	200	25	386	–	–	66	5	13	–	–	–	–	60	5	44960	2[illegible]	13[illegible]	–	–	6	–	7	19344	10743
9	Mohaniya	347	2	–	–	–	142	66	5	–	96	44	2	128	–	–	22	3	16	–	–	109	–	65	2	93730	1[illegible]	14[illegible]	4	–	2	12	12	199794	15967
10	Ramgar .	312	2	–	–	–	199	104	–	7	–	–	2	–	–	–	3	37	17	–	–	166	–	67	–	143200	[illegible]	15[illegible]	–	–	–	8	13	57359	9805
11	Sangyot .	282	2	–	–	–	122	70	–	–	51	37	2	85	–	–	6	2	12	–	–	112	–	60	3	93350	1	15	2	–	4	6	6	81979	13800
	Total	4087	136	90	303	9	1493	908	366	24	435	341	136	764	–	2	343	337	174	47	86	1099	299	798	12	1419520	1	15	25	3	96	326	168	998132	368177

The proportion of Inundated Land in the District of Shahabad that is covered during the whole rainy season, that in ordinary years is occasionally covered, and that is exempt from being flooded except in extraordinary years.

Constantly under water or mere barren channels 136 square miles; Regularly inundated throughout the rainy season 165; Liable only to occasional floods but every year covered for some days at least 237; Land which in some years is liable to be flooded for two or three days 126; Entirely exempt from inundation 3423.

Estimate of the proportion of different classes of society that are employed in agriculture in the District of Shahabad.

Ashraf who do not farm 7257 families; Ashraf who have farms but do not work 5933; Ashraf who have farms, and work with their own hand, but do not plough 31677; Ashraf who hold the plough 36531; Traders (Bakalies) who have farms 512; Traders (Bakalies) who have not farms 7039; Artificers (Pauniyas) who live entirely by their own profession 16836; Artificers (Pauniyas) who have farms, but do not work them by their own hand, few; Artificers (Pauniyas) who occasionally cultivate land, either for themselves or for hire 6953; Karendagan who plough their own farms 67521; Karendagan who take service as ploughmen 32726; Karendagan who are day labourers 4540; Total families 217525.

Estimate of the population of the District of Shahabad, and of some of the causes by which it is affected.

Sects—Muhammedans 98340 families; Hindus 1321180; Total 1419520; *Employments*—Gentry 534899; Traders 48660; Artificers 197612; Ploughmen 638349; *Health*—Proportion of those who have adopted inoculation 520562; Proportion of those who are annually supposed to have fevers 371713; Number of persons who have the leprosy called Kor 3130; Number of persons who have the disease called Charka 630; Number of persons who have the disease called Filpau 6; Number of persons who have the disease called Gheg 17; Number of persons who have the disease called Koranda 305; Number of marriageable girls remaining single at 15 years of age 1700.

An estimate of the proportion of families in the various parts of the District of Shahabad that consist of certain numbers of persons, with the various rates of expense at which such families live.

Families of 100 to 300 persons spending monthly from 1000 to 2000 Rupees 3; Do. of 50 to 100 persons spending monthly from 500 to 700 Rupees 6; Do. of 30 to 60 persons spending monthly from 30 to 200 Rupees 236; Do. of 21 to 30 persons spending monthly from 30 to 100 Rupees 197; Do. of 11 to 20 persons spending monthly from 8 to 50 Rupees 13788; Do. of 7 to 10 persons spending monthly from 5 to 40 Rupees 45326; Do. of 6 persons spending monthly from 4 to 20 Rupees 56656; Do. of 5 persons spending monthly from 3 to 15 Rupees 69115; Do. of 4 persons spending monthly from 2 to 10 Rupees 23788; Do. of 3 persons spending monthly from 1¼ to 6 Rupees 8410; Total 217525.

Estimate of the manner in which the people of Shahabad are lodged.

Families that are partly or in whole accommodated in houses built of stone or brick 217; In mud walled houses of two stories covered with tiles 2420; In mud walled houses of two stories covered with thatch 2275; In mud walled huts covered with tiles 14219; In mud walled huts thatched with grass 185026; In mud walled huts thatched with stubble, sugar-cane leaves, or rushes 11993; In huts with walls of hurdles and covered with thatch 1200; In huts like bee hives 175; Total 217525.

Estimate of the manner in which the people of Shahabad are covered by day and night.

Women who in the cold season generally dress in silk and in the hot season in fine muslin, few; Women who on high occasions dress in Maldehi cloths mixed of silk and cotton, and in common use cloth of tasar and cotton mixed or coarse muslin, sometimes bleached or dyed, more often neither 10437; Women who in full dress use bleached or dyed linen or cloth of tasar and cotton mixed, and on ordinary occasions use unbleached coarse linen 28900; Women who on all occasions wear coarse unbleached linen, but their wrapper is of full breadth 32650; Women who use only a narrow wrapper of unbleached cotton 145538; Men who in full dress use shawls or silk and woollen cloth, and in common use bleached linen 357; Men who always use bleached linen, but have no shawls silk nor broadcloth 29808; Men who only use bleached linen in full dress 32133; Men who use unbleached cotton cloth alone, but the cloth is of a full size 74300; Men who use unbleached cotton cloth alone, but the cloth is very small, and is called Langgoti and Bhogoya 80918; Families the heads of which sleep on the best kind of bedsteads (Palang) 121; Families the heads of which sleep on worse bedsteads (Charpayi) with turned feet 27164; Families the heads of which sleep on very coarse wooden bedsteads (Khatiya) 111542; Families which in the cold season sleep on blankets or sutrunjis, and in summer on mats, few; Families which in summer sleep on coarse mats made of reeds, grass, straw or khajur or palmira leaves, and in winter on straw 78698; Families that anoint themselves once or twice a week 61535; Families that use oil for unction only on great occasions 154990; Families that use essences on great occasions 1000.

An estimate of the manner in which the people of Shahabad are fed.

Families that eat meat daily 75; Families that eat meat from 2 to 10 times a month 19931; Families that sacrifice on great occasions only 148666; Families that cannot afford meat on any occasion or that reject its use 48853; Families that have as much fish as they please, average perhaps from 120 to 150 times a year 215; Families that have fish daily in the cheap season alone, and in the dear season procure it only some times, perhaps in all from 90 to 120 days in the year 41518; Families that have only what fish they can catch themselves, or at least purchase on high occasions only 136617; Families that reject fish 39175; Families that can use Ghiu whenever they please 17900; Families that use milk daily 59441; Families that use milk in the cheap season often, and in the dear season on high occasions 75530; Families that use milk on holidays 82554; Families that seldom procure milk, few; Families that use sugar or sweet-meats when they please 11597; Families that use sugar or sweet-meats one or two times in the week 51047; Families that procure them on holidays 154881; Families that use daily pulse for curry 160896; Families that use pulse for curry frequently 56629; Families that use cultivated vegetables daily 8919; Families that use cultivated vegetables often 66143; Families that use cultivated vegetables seldom 142463; Families that can afford to purchase foreign spiceries sometimes or always 106764; Families that procure oil in abundance 3887; Those that have a moderate allowance of oil 32380; Those that procure oil scantily 95223; Families that procure oil only occasionally or in very small quantities 86035; Families that have salt in abundance 6247; Families that procure a stinted allowance of salt 47773; Families that procure a scanty allowance of salt 113464; Families that procure salt in very small quantities 50041; Families which use rice two times daily, with wheaten cakes occasionally as a variety 58158; Families which use rice in harvest two times, in other seasons wheat or other coarse grains 18073; Families which once a day use boiled rice, and once wheaten cakes 89028; Families which use in general wheat, or other coarse grains, and procure rice on some occasions only 51781; Families which for a part of the year use Mahuya or other substitutes for grain 485; Families which use two or three curries daily or frequently 8919; Families which use two or three curries five or six times a month 56930; Families which use only one curry a day, except on great occasions 151676.

An estimate of the extent to which the people of Shahabad indulge in various intoxicating substances.

Men who are addicted to palm wine 46670; Men who are addicted to distilled liquors 91645; Men who use opium 790; Men who smoke Gangja 5507; Men who use Siddhi or bhang 8790; Men who use Charas, few; Men who smoke prepared tobacco in abundance 124885; Men who cannot smoke abundance of any kind of tobacco or who reject its use 92640; Women who smoke prepared tobacco, few; Men who chew tobacco 146399; Women who chew tobacco 149070; Men who use snuff 7440; Men and women who have betle in abundance 34364; Men and women who are stinted in betle 91133; Men and women who seldom procure betle 92028.

An estimate of the manner in which the people of Shahabad are supplied with fuel and light.

Fire-wood 49651 families; Bushes and reeds, few; Straw, husks and the stems of various crops, few; Cowdung sometimes mixed with husks 166875; Mustard seed oil 55269; Linseed oil usually mixed with that of Poppy seed 112250; Sesamum oil 265; Castor oil or that of the Ricinus 23670; Oil of Safflower or Carthamus 9705; Poppy seed oil 9273; Koranda oil expressed from the seed of the Bassia 1748; Oil of cotton seed 5345; Families which burn a lamp all night 1305; Families which burn a lamp to midnight 18512; Families which burn a lamp three hours 3035; Families which burn a lamp from ¾ to 1½ hours 69432; Families which burn a lamp when they take supper 123938; Families which burn torches or straw at supper 1308.

An estimate explaining the extent of luxury in attendance and conveyance in the district of Shahabad.

Number of tame elephants 16; Camels 18; Saresa or other large horses 525; Ponies of the kind called Tatus 3900; Rath or four-wheeled carriages drawn by oxen 14; Carriages with two wheels drawn by one horse and called Ekka 21; Majholi and Raharu two wheeled carriages drawn by oxen 43; Palanquins 896; Male free domestic servants 2820; Female free domestic servants 265; Poor women who bring water to wealthy families 7100; Men slaves entirely domestic 720; Men slaves partly employed in agriculture 850; Men slaves employed entirely in agriculture 3765.

Explanatory of the state of education in the district of Shahabad.

Men born for the use of the pen.

Men fit to act as writers born in the division 7045; Employed in the district 2344; Employed abroad 1166; Not employed 3650; Strangers employed here as writers 116; Strangers waiting for employment 25. *Men born for the profession of arms*—Men belonging to the district employed in the regular army 4680; Employed in the police or revenue 2095; Employed abroad in the police or revenue 2651; Not employed 44276; Strangers employed in the police or revenue 320; Strangers waiting for employment, few.

List of the Hindu academicians in the district of Shahabad.

Grammar, Law, and Legend 10; Do. do. do. 8; Grammar 12; Do. 15; Do. and Medicine 10; Do. and Legend 15; Do. Law and Magic 12; Grammar 20; Do. Metaphysics and Law 10; Grammar and Poetry human 10; Astrology 10; Grammar 15; Do., Metaphysics, Law, Legend, and Poetry human 20; Grammar 15; Do. and Poetry human 10; Grammar and Law 10; Grammar, Law, and Legend 12; Astrology 4; Medicine 8; Grammar, Law, and Legend 4; Grammar and Law 5; Grammar 2; Do. 4; Do., Law, and Legend 4; Do. Do. Do. 5; Total 250.

Explaining the manner in which the cultivated lands of the District of Shahabad are employed.

Number of houses 33350; Fruit trees 1269000; Bamboos 510; Kitchen gardens 3850; Vegetables in the fields 1130; Broadcast sathi or serha, summer rices, by itself 150500; Do. Do. Do. followed by Masur 5210; Do. Do. Do. followed by Masur mixed with Linseed 3530; Do. do. do. followed by pease 15450; Do. do. do. followed by But or Chana 12840; Do. do. do. followed by But mixed with Linseed 6950; Do. do. do. followed by Barley 12680; Do. do. do. followed by Barley mixed with But 1350; Do. do. do. followed by Wheat 8080; Do. do. do. followed by Tori 700; Do. do. do. followed by Linseed 100; Do. do. do. followed by China 900; Do. do. do. followed by Rarhiya Cotton 330; Do. do. do. followed by Rarhiya Cotton mixed with Masur 430; Do. do. do. followed by Rarhiya Cotton mixed with pease 300; Do. do. do. followed by Rarhiya Cotton mixed with pease and Tori 700; Do. do. do. followed by Rarhiya Cotton mixed with Tori 350; Do. do. do. followed by Poppy mixed with Safflower 200; Broadcast winter rice by itself 881400; Do. do. followed by Khesari sown among the stubble 166200; Do. do. followed by Kesari mixed with Linseed sown among the stubble 55500; Do. do. followed by But sown among the stubble 23300; Do. do. followed by Wheat sown among the stubble 1300; Do. do. followed by Linseed sown among the stubble 5000; Do. do. followed by China 100; Transplanted winter rice by itself 342440; Transplanted winter rice followed by Khesari sown among the stubble 94050; Do. do. followed by Khesari mixed with Linseed sown among the stubble 48400; Do. do. followed by But sown among the stubble 8950; Do. do. followed by Wheat sown among the stubble 500; Do. do. followed by Linseed sown among the stubble 6550; Spring rice or Bora 450; Tangni by itself 4090; Tangni followed by pease 3850; Do. followed by Barley 7740; Do. followed by Wheat 4290; Do. followed by Tori 1200; Do. followed by Sarso 1570; Do. followed by Rarhiya Cotton 150; Do. mixed with Arahar 3600; Do. mixed with Cotton (Baresa) 700; Do. mixed with Cotton, Baresa, and Arahar 70; Do. followed by Poppy mixed with Safflower 1417; Broadcast Maruya mixed with Arahar 1900; Do. do. mixed with Baresa Cotton 100; Do. do. followed by Rarhiya Cotton mixed with Tori 100; Transplanted Maruya by itself 6200; Do. do. followed by pease 3300; Do. do. followed by China 60; Do. do. followed by Barley 9650; Do. do. followed by Wheat 5100; Do. do. followed by Sarso 1630; Do. do. followed by Carrots 10; Do. do. followed by Vegetables 30; Do. do. followed by Rarhiya Cotton 250; Do. do. followed by Poppy mixed with Safflower 1455; Kodo Bhadai by itself 8070; Do. do. followed by pease 800; Do. do. followed by But 2520; Do. do. followed by But mixed with Linseed 50; Do. do. followed by Linseed 40; Do. do. mixed with Arahar 15830; Do. do. mixed with Arahar and Patuya or Nagarjun 400; Kodo by itself 40850; Do. mixed with Arahar 88250; Do. mixed with Arahar and Patuya 9300; Do. mixed with Arahar and Til 8350; Sawang by itself 6600; Do. followed by Masur 750; Do. followed by pease 1750; Do. followed by But 1900; Do. followed by But mixed with Linseed 400; Do. mixed with Arahar 5200; Do. mixed with Arahar and Urid 1200; Do. mixed with Urid 100; Do. followed by Barley 1150; Do. followed by Wheat 3300; Do. followed by Tori 300; Do. followed by Linseed 400; Maize by itself 6830; Do. followed by pease 7500; Do. followed by Barley 12985; Do. followed by Wheat 14010; Do. followed by Wheat mixed with Sarso 15; Do. followed by Sarso 1870; Do. followed by China 40; Do. followed by Rarhiya Cotton 400; Do. followed by Tobacco 80; Do. followed by Poppy mixed with Safflower 1765; Do. mixed with Arahar 32650; Do. mixed with Arahar and Baresa Cotton 275; Do. mixed with Baresa Cotton and Ricinus 400; Janera (Masuriya) by itself 15200; Do. mixed with Kodo 75; Do. mixed with Arahar 50; Do. mixed with Arahar and Ricinus 50; Do. mixed with Urid 400; Do. mixed with Urid and Til 450; Do. mixed with Mung 200; Do. mixed with Mothi and Til 1000; Bajra by itself 100; Do. mixed with Mothi 1700; Do. mixed with Urid 850; Do. mixed with Til 450; Gudali by itself 50; China 300; Do. Hathiya by itself 320; Do. do. mixed with But 600; Do. do. mixed with Rayhi or Lahi 500; Do. do. mixed with Safflower 100; Do. do. mixed with Ricinus 40; Wheat by itself 367250; Do. mixed with But (Gochana) 61100; Do. mixed with Barley (Gujai) 800; Do. mixed with Sarso 9490; Do. mixed with Lahi or Rayi 5000; Do. mixed with Linseed 6450; Barley by itself 238410; Do. mixed with pease (Jaokerao) 13450; Do.

mixed with But (Jaoberra) 58700; Do. mixed with Sarso 650; Do. mixed with Rayi 10500; Masur by itself 80200; Do. mixed with Linseed 85300; Do. mixed with Linseed and Sarso 250; Pease (Sugiya) by themselves 120100; Do. (Kabali) by themselves 203200; Do. (Dabli) by themselves 50800; Do. (Kabali) mixed with Sarso 400; Khesari by itself 30; Arahar by itself 2300; Do. mixed with Kulthi 5400; Do. mixed with Urid 3050; Do. mixed with Mothi 4100; Do. mixed with Til 100; Urid Bhadai by itself 9100; Urid Aghani by itself 3750; Urid sown in the mud without culture 600; Kulthi by itself 54425; Mothi by itself 19550; Mung by itself 2185; But by itself 271400; Do. mixed with Lahi or Rayi 12500; Do. mixed with Linseed 163650; Do. mixed with Linseed and Safflower 500; Tori by itself 22380; Sarso by itself 11000; Rayi sown in the mud without culture 9000; Linseed by itself 7600; Til Bhadai by itself 730; Til Aghani by itself 540; Tobacco by itself 1065; Do. mixed with Murai 515; Betle leaf 24; Sugarcane Mango 880; Do. Barukha 580; Do. Reongra 620; Do. Sarotiya 700; Do. Bhorongga 850; Do. Kewa 50; Do. Bhurli 300; Cotton (Baresa) by itself 40; Do. do. mixed with Urid 40; Do. (Rarhiya) by itself 4905; Do. do. mixed with Masur 4390; Do. do. mixed with pease 5000; Do. do. mixed with pease and Sarso 7850; Do. do. mixed with Sarso 700; Do. do. mixed with Sarso and Safflower 100; Indigo by itself Phaguniya Bawog 650; Do. do. Ashariya Bawog 1 year 12200; Do. do. do. do. 2 years 11700; Do. do. do. do. 1 year 1350; Do. do. do. do. 2 years plant and seed 1300; Indigo by itself Kartika Bawog 200; Do. do. do. do. 1 year 50; Do. do. do. do. 2 years 50; Poppy by itself 300; Do. mixed with Safflower 7665; Safflower by itself 100; Carrots by themselves 410; Do. followed by Onions 33; Potatoes by themselves 225; Shukurkund 520; Onions 230; Garlic 82; Ajoyan sown in the mud without culture 600; Saongph by itself 25; Jira by itself 590; Do. mixed with Ajoyan 265; Do. mixed with Dhaniya 253; Do. mixed with Mangrela 20; Ricinus (Baghrengr) 910; Do. (Chanaki) 935; Seedling Land by itself 40651; Total 4402560.

General Abstract of the value and produce of lands occupied by farmers who cultivate with the plough in the District of Shahabad.

Fruit trees value of fruit in Rupees 350000; Bamboos value cut annually in Rupees 1230; Vegetables, &c. in gardens and fields value in Rupees 41006; GRAIN—*Rice*—Quantity in Mans 7366347; Value in Rupees 4709362; Quantity remaining for consumption after deducting seed 6776085. *China, Tangni, Sawang, Maruya, Maize, Kodo, Bajra and Jenara*—Quantity in Mans 968436; Value in Rupees 520285; Quantity remaining for consumption after deducting seed 943859. *Wheat and Barley*—Quantity in Mans 3269325; Value in Rupees 2647742; Quantity remaining for consumption after deducting seed 2828238. *Pulse*—Quantity in Mans 4480742; Value in Rupees 2707708; Quantity remaining for consumption after deducting seed 3986935. *Sarso, Tori, Lahi, Linseed, Til, Poppy Seed, Safflower Seed and Ricinus*—Quantity in Mans 365487; Value in Rupees 347513; Quantity remaining for consumption after deducting seed 352576. *Sugarcane*—Quantity in Mans of extract 42217; Value in Rupees 62435. PLANTS FOR MAKING THREAD AND ROPE—*Patuya*—Quantity in Mans 1136; Value in Rupees 1907. *Cotton*—Quantity of Mans 67468; Value in Rupees 237919. PLANTS FOR SMOKING AND CHEWING—*Betle leaf*—Value in Rupees 3600; *Tobacco*—Quantity of Mans 5087; Value in Rupees 9765. *Opium*—Quantity of Mans 1201; Value in Rupees 83231. PLANTS USED FOR DYING—*Indigo*—Value in Rupees 66474. *Seed*—Quantity in Mans 1125; Value in Rupees 3814. *Safflower flower*—Quantity in Mans 779; Value in Rupees 4544. MEDICINE—*Mangrela*—Quantity in Mans 6; Value in Rupees 20; Quantity remaining for consumption after deducting seed 5. Total value of each Thanah as follows—Arah 1493299; Biloti 895341; Dumraong 1341029; Ekwari 1067228; Karangja 963124; Baraong 1160931; Shahasram 768525; Tilothu 298970: Mohaniya 1582296; Ramgar 1274200; Sangyot 953159; Table land 208311; Grand Total Rupees 12006417.

Estimate of the quantity of milk procured by the owners of cattle in the district of Shahabad.

	Cows.						Buffaloes.						Total.	
	Total number.	Number giving milk.	Average yearly produce of each cow in sers of 80 Sa. Wt.	Total milk in *mans* and sers.	No. of sers of milk sold for one rupee.	Total value of milk in rupees and anas.	Total number.	Number giving milk.	Average yearly produce of each buffalo in sers of 80 Sa. Wt.	Total milk in *mans* and sers.	No. of sers of milk sold for one rupee.	Total value of milk in rupees and anas.	Total milk in *mans* and sers.	Total value of milk in rupees and anas.
Arah . .	35070	17535	285	124936 35	32	156171 1	1000	500	495	6187 20	45	5500 ..	131124 15	161671 1
Biloti . .	44450	22225	172	95567 20	54	70790 11	2000	1000	343	8575 ..	46	7456 8	104142 20	78247 3
Dumraong .	39960	19980	184	91908 ..	46	79920 ..	1500	750	316	5925 ..	32	7406 4	97833 ..	87326 4
Ekwari . .	101660	50830	220	279565 ..	62	180364 8	2000	1000	422	10550 ..	62	6806 7	290115 ..	187170 15
Karangja .	33300	16650	165	68681 10	63	43607 2	1200	600	405	6075 ..	51	4764 11	74756 10	48371 13
Baraong . .	32000	16000	87	34800 ..	33	42181 13	1000	500	232	2900 ..	35	3314 4	37700 ..	45496 1
Shahasram .	31930	15965	80	31930 ..	30	42573 5	600	300	400	3000 ..	32	3750 ..	34930 ..	46323 5
Tilothu . .	9600	4800	100	12000 ..	28	17142 13	500	250	400	2500 ..	32	3125 ..	14500 ..	20267 13
Mohaniya .	15350	7655	110	21051 10	34	24766 2	1000	500	560	7000 ..	34	8235 4	28051 10	33001 6
Ramgar . .	29140	14570	80	29140 ..	32	36425 ..	2600	1300	320	10400 ..	51	8156 14	39540 ..	44581 14
Sangyot . .	20500	10250	100	25625 ..	28	36607 2	1000	500	480	6000 ..	28	8571 6	31625 ..	45178 8
	392960	196460	..	815204 35	..	730549 9	14400	7200	..	69112 20	..	67086 10	884317 15	797636 3
Additional cows in Dumraong would give	66600	33300	184	153180 ..	46	133200 ..								
Do. Karangja do.	92500	46250	165	190781 10	63	121130 15								
Do. Tilothu do.	35200	17600	100	44000 ..	28	62857 2								
Total additional	194300	97150	..	387961 10	..	317188 1								

Estimate of the Live Stock in the District of Shahabad.

Cows belonging to the high casts 157460; Cows belonging to tradesmen 107030; Cows belonging to farmers 129870; Bulls reserved for breeding 3240; Bulls wrought in the plough, belonging almost entirely to the high casts 15400; Oxen used in wheel carriages employed only for conveying passengers 28; Do. used in carts employed sometimes for carrying passengers and sometimes for carrying goods 261; Do. used for carrying back loads belonging to traders 7650; Do. used both in the plough and for carrying loads or to draw carts 14050; Do. used in machinery 2995; Do. used in the plough alone belonging to the high casts 286690; Do. used in the plough alone belonging to tradesmen 28105; Do. used in the plough alone belonging to mere farmers 226855; Buffaloes used in the plough 245; Milk Buffaloes 16800; Goats grown females 16400; Sheep called Garar breeding females 35350; Swine total 27600; Asses 1015; Total value 6341042. Cows in Dumraong according to the rate between males and females in Biloti 66600; Do. in Karangja according to the rate in Ekwari 92500; Do. in Tilothu according to the rate in Ekwari 35200; Total cows in those three divisions 194300; Total value in do. 863650; Cows to be added to those stated in the table 82860; Value in Rupees 380849.

Estimate of the proportion of rent in the District of Shahabad paid by the high castes, dealers, artificers, and ploughmen; and of the proportion of the ploughs held by their owners or men of their families, or by hired servants or slaves, &c.

Rent paid by high casts—Arah 48-64; Biloti 40-64; Dumraong 29-64; Ekwari 40-64; Karangja 24-64; Baraong 32-64; Shahasram 36-64; Tilothu 22-64; Mohaniya 32-64; Ramgar 40-64; Sangyot 40-64. Rent paid by merchants or shopkeepers and by artificers—Arah 4-64; Biloti 4-64; Dumraong 3-64; Ekwari 4-64; Karangja 3-64; Baraong 4-64; Shahasram 6-64; Tilothu 5-64; Mohaniya 6-64; Ramgar 2-64; Sangyot 2-64. Rent paid by ploughmen or karindagan—Arah 12-64; Biloti 20-64; Dumraong 32-64; Ekwari 20-64; Karangja 37-64; Baraong 28-64; Shahasram 22-64; Tilothu 37-64; Mohaniya 26-64; Ramgar 22-64; Sangyot 22-64. Ploughs held by persons who rent land and have stock—Arah 48-64; Biloti 32-64; Dumraong 48-64; Ekwari 40-64; Karangja 24-64; Baraong 44-64; Shahasram 48-64; Tilothu 48-64; Mohaniya 44-64; Ramgar 40-64; Sangyot 24-64. Ploughs held by servants or slaves—Arah 16-64, Biloti 32-64; Dumraong 16-64; Ekwari 24-64; Karangja 40-64; Baraong 20-64; Shahasram 16-64; Tilothu 16-64; Mohaniya 20-64; Ramgar 24-64; Sangyot 40-64. Proportion of rent farmed—Arah 48-64; Biloti 64-64; Dumraong 48-64; Ekwari 60-64; Karangja 56-64; Baraong 1-64; Shahasram, few; Mohaniya 56-64; Ramgar 48-64; Sangyot 56-64. Proportion of rent collected by stewards—Arah 16-64; Dumraong 16-64; Ekwari 4-64; Karangja 8-64; Baraong 63-64; Shahasram 64-64; Tilothu 64-64; Mohaniya 8-64; Ramgar 16-64; Sangyot 8-64. Proportion of rent paid in money—Arah 48-64; Biloti 52-64; Dumraong 40-64; Ekwari 8-64; Karangja 16-64; Baraong 2-64; Shahasram 8-64; Tilothu 8-64; Mohaniya 16-64; Ramgar 8-64; Sangyot 8-64. Proportion of rent arising from a division of crops—Arah 16-64; Biloti 12-64; Dumraong 24-64; Ekwari 56-64; Karangja 48-64; Baraong 62-64; Shahasram 56-64. Tilothu 56-64; Mohaniya 48-64; Ramgar 56-64; Sangyot 56-64.

An estimate of the number of cattle allowed for each plough in the different divisions of the Shahabad District.

Number of ploughs wrought by 4 oxen in Arah 42-64; Number of bigahs cultivated by 1 plough in do. 38. Do. do. by 4 oxen in Biloti 48-64; Do. bigahs cultivated by 1 plough in do. 30 to 38. Do. do. by 4 oxen in Dumraong 48-64; do. bigahs cultivated by 1 plough in do. 30 to 38. Do. do. by 4 oxen in Ekwari 56-64; do. bigahs cultivated by 1 plough in do. 29. Do. do. by 4 oxen in Karanja 38-64; do. of bigahs cultivated by 1 plough in do. 29. Do. do. by 4 oxen in Baraong 52-64; do. of bigahs cultivated by 1 plough in do. 30. Do. do. by 4 oxen

in Shahasram 62-64; do. of bigahs cultivated by 1 plough in do. 19. Do. do. by 4 oxen in Tilothu 44-64; do. bigahs cultivated by 1 plough in do. 23. Do. do. by 4 oxen in Mohaniya 52-64; do. bigahs cultivated by 1 plough in do. 30. Do. do. by 4 oxen in Ramgar 62-64; do. bigahs cultivated by 1 plough in do. 30. Do. do. by 4 oxen in Sangyot 58-64; do. bigahs cultivated by 1 plough in do. 30. Number of ploughs wrought by 3 oxen in Dumraong 12-64; Number of bigahs cultivated by 1 plough in do. 29. Do. do. by 3 oxen in Ekwari, few; do. bigahs cultivated by 1 plough in do. 19. Do. do. by 3 oxen in Karangja 24-64; do. bigahs cultivated by 1 plough in do. 19. Do. do. by 3 oxen in Baraong 4-64; do. bigahs cultivated by 1 plough in do. 23. Do. do. by 3 oxen in Shahasram 2-64; do. bigahs cultivated by 1 plough in do. 14. Do. do. by 3 oxen in Tilothu 8-64; do. bigahs cultivated by 1 plough in do. 17. Do. do. by 3 oxen in Mohaniya 8-64; do. bigahs cultivated by 1 plough in do. 23. Do. do. by 3 oxen in Ramgar 1-64; do. bigahs cultivated by 1 plough in do. 23. Do. do. by 3 oxen in Sangyot 4-64; do. bigahs cultivated by 1 plough in do. 23. Ploughs wrought by 2 oxen in Arah 22-64; do. bigahs cultivated by 1 plough in do. 19. Do. do by 2 oxen in Biloti 16-64; do. bigahs cultivated by 1 plough in do. 19. Do. do. by 2 oxen in Dumraong 4-64; do. bigahs cultivated by 1 plough in do. 19. Do. do. by 2 oxen in Ekwari 8-64; do. bigahs cultivated by 1 plough in do. 14. Do. do. by 2 oxen in Karangja 2-64; do. bigahs cultivated by 1 plough in do. 14. Do. do. by 2 oxen in Baraong 8-64; do. bigahs cultivated by 1 plough in do. 15. Do. do. by 2 oxen in Shahasram, few. Do. do. by 2 oxen in Tilothu 12-64; do. bigahs cultivated by 1 plough in do. 11½. Do. do. by 2 oxen in Mohaniya 4-64; do. bigahs cultivated by 1 plough in do. 15. Do. do. by 2 oxen in Ramgar 1-64; do. bigahs cultivated by 1 plough in do. 15. Do. do. by 2 oxen in Sangyot 2-64; do. bigahs cultivated by 1 plough in do. 15.

An estimate of the farmers who pay their rent from their own stock, of those who borrow ready money for the purpose, of those who take advances for produce but at the crop season are able to discharge their engagements, and of those who are yearly increasing their debts.

Farmers who pay their rent from their own stock—Arah 4-64; Biloti 16-64; Dumraong 4-64; Ekwari 1-64; Karangja 8-64; Baraong 2-64; Shahasram 8-64; Tilothu 8-64; Mohaniya 12-64; Ramgar 8-64; Sangyot 24-64. Farmers who borrow ready money to pay their rent—Arah 44-64; Biloti 24-64; Dumraong 20-64; Ekwari 7-64; Karangja 40-64; Baraong 24-64; Shahasram 16-64; Tilothu 16-64; Mohaniya 20-64; Ramgar 16-64; Sangyot 36-64. Farmers who take advances on their crop to enable them to pay their rent—Arah 16-64; Biloti 24-64; Dumraong 32-64; Ekwari 56-64; Karangja 16-64; Baraong 38-64; Shahasram 40-64; Tilothu 40-64; Mohaniya 32-64; Ramgar 40-64; Sangyot 4-64. Farmers who are annually increasing their debts—Arah, few; Dumraong 8-64; Ekwari, few; Karangja, few; Baraong, few; Shahasram, few; Tilothu, few; Mohaniya, few; Ramgar, few; Sangyot, few. Farmers who take advances from their landlord to assist in cultivation—Arah 200; Biloti 2-64; Dumraong, few; Baraong 4-64; Shahasram 16-64; Tilothu 8-64; Mohaniya 4-64; Ramgar 40-64; Sangyot 32-64.

Estimate of the number and kinds of Artists in the District of Shahabad.

1. Painters, houses 23; 2. Mirasin, sets 1; 3. Bais or dancing girls, sets 24; 4. Natuyas 37; 5. Kalawangts 10; 6. Kathaks 32; 7. Tasawalas, sets 1; 8. Bajawalas, men 3146; 9. Daphalis 105; 10. Pawangriyas 68; 11. Hijaras 11; 12. Bazigurs 0; 13. Washermen 1240; 14. Shawl washermen 2; 15. Soap makers 10; 16. Torch and platter makers 217; 17. Taylors 357; 18. Barbers 2212; 19. Hauxkush 1; 20. Red lead makers 9; 21. Makers of lack ornaments 33; 22. Makers of glass ornaments 249; 23. Makers of ornaments called Tikli 11; 24. Malis 190; 25. Domra 242; 26. Bangsphor 7; 27. Tarkibaras 2; 28. Mat makers 86; 29. Paper makers 60: 30. Makers of fire-works 23; 31. Chamar or shoemakers 2050; 32. Makers of leather bags 4; 33. Saddle makers 6; 34. Makers of saddle cloths

24; 35. Makers of tubes for smoking tobacco 3; 36. Rozkush 98; 37. Distillers of spirituous liquors 112; 38. Pasis who collect palm juice 340; 39. Shops for retailing palm wine 17; 40. Gandhi 2; 41. Oilmen, houses 2780; Do. mills 2880; 42. Preparers of milk and butter 2590; 43. Confectioners (Halwais) 588; 44. Grain parchers 1845; 45. Flour grinders 120; 46. Nanwais or bakers 8; 47. Chik or mutton butchers 57; 48. Beef butchers 41; 49. Comb makers 15; 50. Turners 19; 51. Kamangurs 7; 52. Carpenters 727; 53. Carpenters and black-smith 1245; 54. Blacksmiths 895; 55. Horse shoers 21; 56. Cutlers 21; 57. Coppersmiths called Kaseras 41; 58. Do. called Thathera 63; 59. Workers in tin 27; 60. Gold and silver-smiths 840; 61. Sondhoyas 2; 62. Stone cutters 71; 63. Potters 910; 64. Brick makers 5; 65. Bricklayers 57; 66. Lime burners 12; 67. Cotton beaters 668; 68. Dyers 119; 69. Weavers of cloth of Tasar silk and cotton mixed, houses 60; Looms 90; 70. Cotton weavers, houses 7025; Looms 7950; 71. Women who flower cloth 20; 72. Chints makers 3; 73. Cotton tape weavers 2; 74. Carpet weavers 30; 75. Blanket weavers 530; 76. Patwars 131; 77. Boilers for making nitre 75; 78. Makers of Surya pakka salt 70; 79. Furnaces for preparing kasis 6.

Estimate of the Exports and Imports of the Shahabad District.

Rice in the husk, Exports Rupees 21363; Imports Rupees 3021. Rice cleaned by boiling, Export 1172; Import 35340. Rice cleaned without boiling, Export 117180; Import 10222. Wheat, Export 232210; Import 979. Barley, Export 13906. Jaokerao, Export 363. Arahar, Export 7699; Import 160. Mung, Export 100. Urid, Export 1800; Import 1000. Khesari, Export 5063; Import 1036. Masur, Export, 29128. Chana or but, Export 128993; Import 222. Matar or pease, Export, 21266. Lahi or mustard, Export 3350; Import 324. Linseed, Export 2115; Import 200. Jira seed, Export 12000. Til, Export 240; Import 30. Cocoanuts, Import 138. Bettlenut, Import 3605. Tobacco, Import 10459. Sugar or Chini, Import 3956. Shukkur, Import 625. Molasses, Import 750. Treacle, Import 117. Cake extract of sugarcane, Export 4738; Import 2671. Salambi salt, Import 5417. Pangga salt, Import 100128. Sea salt, Import 24570. Cotton wool, Import 25366. Cotton with the seed, Export 25147; Import 8320. Iron, Import 19474. Iron vessels, Import 200. Zinc, copper, lead, and tin, Import 5258. Vessels of brass and bell-metal Export 2500; Import 10645. Pesari goods, Export 1000; Import 10050. Paper, Export 36150. Betle leaf, Import 2950. Sajimati, Import 1805. Rehemati, Import 200. Bher khari, Import 133. Bhang or Gangja, Import 1000. Mauhuya flowers, Import 2400. Small timber and bamboos, Export 2100. Woollen and cotton carpets, Export 2000; Import 850. Blankets, Export 2000. Cotton cloth, Export 204000; Import 20200. Chints and Kharuya, Import 3950. Silk cloth, Maldehi, Import 4350. Cloth of Tasar silk and cotton mixed, Import 2550. Gold and silver lace, Import 300. Essences, Import 550. Shoes, Import 400. Manihari goods, Export 150; Import 1170. Cotton thread, Export 800. Opium, Export 83231; Import 742. Nitre, Export 1050. Ghiu, Export 16063; Import 2600. Oil, Export 2722. Turmeric, Import 430. Dry ginger, Import 400. Vegetables, Import 1000. Onions, garlic, and capsicum, Import 100. Lime, Export 3500. Sackcloth rags, Import 5429. New sackcloth, Export 50; Import 460. Buffaloes, Export 163. Oxen, Import 21925. Cocoons, Export 3000; Import 5000. Tasar silk, Export 5000. Lack or lahi, Export 120. Kasis, Export 135. Dhuna, Export 45. Kath or Catechu, Export 900. Chironji, Export 120. Stones, Export 500. *Total Exports* Rupees 995132; *Total Imports* Rupees 365177.

MARKET TOWNS IN BEHAR AND PATNA.

Division I. The City and Suburbs of Patna.

No. II. Division under Thanah Phatuha.—MARKET PLACES.—**Kusbah Phatuha.** Samaypur jafurabad. Moujipur. Jethauli. Lakhna. Baikunthapur.

No. III. Division under Thanah Noubutpur.—MARKET PLACES.—**Kusbah Noubutpur.** Rampar Fayezabad and Gopalpur. Pitwangs. Kabai. Pothahi.

No. IV. Division under Thanah Bakipur-Jaywar.—MARKET PLACES.—**Kusbah** Phulwari. Digha. Sekundurpur-Jumshayed. Korra-Harisangkarpur. Lasli (Lesley) gunj. Camp Bazar Danapur. Ardali (Orderly) bazar in Danapur. Paltan (Battalion) Bazar in Danapur. Purana (Old) Danapur.

No. V. Division under Thanah Sherpur.—MARKET PLACES.—**Kusbah Sherpur.** Dostnagar. Maner. Rapura. Saray. Lodipur.

No. I. Division of Thanah Gaya or Sahebgunj.—MARKET PLACES.—**Sahebgunj** or Morarpur and Elahabad. Shahar (city) Gaya. Buniyadgunj. Chakan. Bela. Kailasgunj. Pangchananpur. Tikari. Shahgunj. Mauongk. Koch. Majurahanda. Dehari. Angti. Mangraur. Harihargunj. Bauna. Dekuli. Bodh gaya. Bakraur. Lekhagur. Keriyatpur. Futehpur. Kinar. Baharama. Beruni. Chauki. Rauna. Sulimpur. Lakhanpura. Ghugritangr.

No. II. Division under Thanah Nawada.—MARKET PLACES.—**Bazar Nawada.** Kumalpur bareya. Bareo. Namdargunj. Akburpur. Rajauli. Amaya. Kusbah Hangsuya or Pangchu. Nardigunj. Kadergunj. Waresaligunj. Aligunj.

No. III. Division under Thanah Sheykhpurah. MARKET PLACES.—**Bazar Kusbah Sheykhpurah.** Chakbudhauli. Barabigha. Sekundura. Lachhuyara. Nabinagar. Katri Saray. Merzagunj. Chauyare. Kazi Futechuk.

No. IV. Division under Thanah Duriyapur.—MARKET PLACES.—**Bazar Duriyapur.** Mokayang. Siunar. Barpura. Mor. Sultanpur. Mekra. Kanaipur. Dumra. Barui. Bulguzur. Lakkhi Saray. Marachi. Jayengtpur. Kurmichak. Kangrera. Aota. Hathidaha. Khuta. Ramchandrapur. Pipuriya. Indupur. Dumri. Pratappur.

No. V. Division under Thanah Bar.—MARKET PLACES.—**Kusbah Bar.** Masumgunj. Sadukpur Nawada. Punarak. Mubarukabad. Cheorogunj or Dihiri mahal. Bukhtyarpur. Hathmangola. Saksohara. Chaungdi. Bara. Rawaich. Raili. Jamunichak.

No. VI. Division under Thanah Behar.—MARKET PLACES.—**Kusbah Behar.** Bazar Asanagar. So-saray. Bazar Kotubpurah. Nursaray. Merzaigunj. Ramgunj. Bazar Naypurah. Bazar Silao. Kusbah Rajgriha. Bazar Bhadai. Bahadurgunj. Maghra.

No. VII. Division under Thanah Helsa.—MARKET PLACES.—**Kusbah Helsa Saydabad and Kazichuk.** Kusbah Bara-Nawada. Sorarhi. Goraipur. Narsandagunj. Nagarnausa. Lodipurtina. Tharthari. Bangpura. Nihichalgunj. Rasisa. Kabangunj. Ekanggardihi. Ekanggar-Saray and Nabigunj. Telarha. Vogipur. Jaytiya.

No. VIII. Division under Thanah Holasgunj.—MARKET PLACES.—**Kusbah Holasgunj.** Kusbah Islamgunj. Ata saray. Manus saray. Maharajgunj. Dakuya saray. Bauri saray. Khodaygunj. Bazar Kaur. Hathiyawang bazar. Madargunj. Sarbahada saray. Khezurgunj. Vishnugunj. Nawabgunj. Kusbah Lakhawar. Kanaiyagunj.

No. IX. Division under Thanah Jahanabad.—MARKET PLACES.—**Kusbah Jahanabad.** Kazi-saray and Mostufabad. Doulutpur. Kangko. Damuya. Chongra. Kurtha. Tehatta. Kayemgunj. Mukhdum saray. Rampur. Paibigha. Patiawang. Kshemkaran saray. Gopalgunj. Bedigunj. Sekura. Tali. Kinari. Masdi. Barni. Panditgunj. Madangunj. Bandhugunj. Gopalgunj. Supi. Saydabad.

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No. XI. Division under Thanah Arwal.—MARKET PLACES.—**Kusbah Waselpur.** Sabdala. Mahola. Hat inglis (Invalids.) Usri. Belkhara. Telpahat. Karpi. Kingjar. Imamgunj. Bhadasi. Fidrukpur. Mahabalipur.

No. XII. Division under Thanah Vikram.—MARKET PLACES.—**Vikram.** Bhimnichak. Silauri. Pansihi. Bhagawangunj. Gunj-Pali. Ekbalgunj. Patut. Lai. Viswambharpur. Sadisopur. Ganpura. Motepur. Sarasat.

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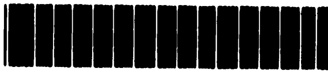
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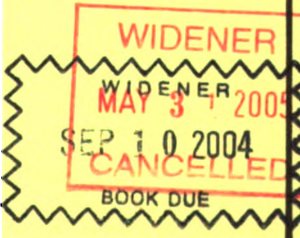
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